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PHARMACEUTICAL MEETING

"Keep well—Consult your Family Physician" is the slogan proposed as a part of the advertising campaign to be fostered by the American Pharmaceutical Manufacturers' Association in the coming year. Definite action on the nature of this campaign as well as action on the future research program of the Association will be taken at the semi-annual meeting to be held in the Hotel Washington, Washington, D. C., December 16 and 17, 1929.

The meeting to be held on the first day will be given over largely to problems of executive nature and a general discussion of means and ways of obtaining greater efficiency and economy in distribution.

The second day will be devoted primarily to meeting members of the various government bureaus and departments with which the members of the Association come in contact in the course of their daily activities.

A visit to the Food, Drug and Insecticide Administration, Department of Agriculture and to the Prohibition and Narcotic Divisions of the Treasury Department will occupy the forenoon of December 17th.

At the luncheon on this day, Senator George H. Moses, of New Hampshire, President, pro-tempore of the United States Senate, will be the guest of honor and will address the members. The afternoon will be devoted to addresses by other government officials and reading and discussion of the reports of the Research Board and the Contact Committee of the Association.

Among the important topics to be discussed in the executive sessions are Publicity, The Proposed Census of Dispensing Physicians, Institutional Advertising and the "Consult your Family Physician" campaign.

The officers of the Association are:

President: H. Sheridan Baketel, M. D., Jersey City, N. J.

Vice Presidents: Henry Osterman, Seymour, Ind., E. P. Crowe, Philadelphia, Pa.

Secretary: John G. Searle, Chicago, Ill.

Treasurer: Frank A. Mallott, Des Moines, Iowa.

The Wisconsin Medical Journal

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Lobar Pneumonia: Specific Etiology and Therapy*

By FRANKLIN C. McLEAN, M. D.
Professor of Medicine, University of Chicago

Since you have been led to expect an oration in medicine I should presumably open my remarks with an apostrophe to the "Captain of the Men of Death," a phrase originally applied by John Bunyan to tuberculosis, and later borrowed by Osler as having become more applicable to pneumonia. Since, however, I am not an orator, and since I am sure that no one here seriously expects to hear an oration, I shall limit my introductory remarks to a reminder that pneumonia ranks high in our mortality statistics, and that it is responsible for more than 100,000 deaths per annum in the United States, the majority being due to true lobar pneumonia.

SPECIFIC ETIOLOGY

In 1881 Sternberg of the U. S. Public Health Service, discovered the pneumococcus in human saliva. It was not until 1884, however, that Fränkel discovered the association of this organism with lobar pneumonia, and established its causal relationship to the disease. More recent investigations have shown that approximately 95% of cases of lobar pneumonia are associated with the pneumococcus, the remainder being caused by streptococcus hemolyticus, the Friedländer bacillus, and occasionally the staphylococcus or influenza bacillus.

Following the early work with respect to the specific etiology of pneumonia further progress was slow until Dochez and Gillespie (1913) extending the findings of Neufeld, showed that the pneumococci could be differentiated into groups, according to their immunological properties. Their work opened a large new field in the study of lobar pneumonia, and is the basis of most of the modern work on the disease. They were able to show that pneumococcus lobar pneumonia is caused by a number of organisms, which, while almost identical in morphological and cultural characteristics, are so widely separated from the immunological point of view, that the pneumonias which they cause deserve almost to rank from the standpoint of etiology as separate infectious diseases. They found that at least three specific groups could be recognized by their immunological properties, and named these groups Types I, II, and III. The remainder of the pneumococci, less specific in their characteristics, were classified arbitrarily as Group IV.

It now became possible to study lobar pneumonia as a group of infectious diseases, each of which could be identified, and further advance in epidemiology and in the search for specific methods of therapy was made possible.

The incidence of the various types was early studied, and is of much importance, especially with reference to epidemiology, prognosis, and the possibility of successful specific therapy. While the incidence varies in different localities, and from year to year in the same locality, the average is about 35% for Type I, 20% for Type II, 15% for Type III, and the remainder of 30% for the heterogeneous Type IV. Of these Types II and III are the most serious, from the standpoint of mortality.

The difficulties incident to prompt recognition of the type of pneumococcus present in any given case of pneumonia are undoubtedly partly responsible for the slowness with which our current knowledge of the etiology of the disease has been made use of in the practice of medicine. Since the various types are indistinguishable microscopically or culturally more elaborate immunological methods are required. With the standard method, which consists in obtaining a pure culture of the organism by inoculating sputum into the peritoneal cavity of a mouse, and then agglutinating the organisms thus obtained by known specific anti-sera, the identification of the organism can be carried out in about eight hours, but the technical difficulties are such that unless trained workers are available errors may be made, or the final identification of the organism may be much delayed. In some cases specific substances may be found in the urine early in the disease, leading to an early diagnosis of the type by a simple precipitin test, but this does not occur with sufficient regularity to permit

*Oration in Medicine, presented before the 87th Annual Meeting, State Medical Society of Wisconsin, Milwaukee, September 13, 1928.

of dependence being put upon it as a routine diagnostic method.

The differentiation of the pneumococci has led to considerable advance in our knowledge of the epidemiology of lobar pneumonia. Although lobar pneumonia has been regarded as infectious since 1884, the finding of pneumococci in the upper respiratory passages of a large proportion of normal individuals led for a long time to the belief that the disease was generally due to invasion of the lungs by an organism which was a normal inhabitant of the mouth, and the idea of pneumonia as a transmissible disease, against which the precautions usual in infectious diseases should be taken, has only very recently gained currency.

The epidemiology of lobar pneumonia has been very carefully studied at the hospital of the Rockefeller Institute, with the result that Types I and II, between them responsible for about 60% of all cases of the disease, have practically never been found in the mouths of normal individuals not in contact with infected patients, from which one may instantly conclude that pneumonia due to these types is not an autogenous infection, but follows invasion by these organisms from without. Type IV, which is the organism usually found in healthy persons, is to be regarded as a non-virulent saprophyte, which only under certain conditions may invade the bronchi and cause pneumonia.

The additional proof offered by the finding of pneumococcus carriers among those in contact with the disease, and by the not infrequent occurrence of direct transmission, with identification of the same organism as that found in the patient harboring the disease, compels a revolutionary alteration in our attitude toward the public health aspects of lobar pneumonia.

Lobar pneumonia must now be considered as an endemic, infectious, and to some extent a contagious disease, transmitted from person to person, or carried by individuals who have been in contact with the disease and who, although themselves healthy, harbor virulent pneumococci in their mouths. That this was not earlier recognized is due to several causes, of which the finding of pneumococci in the mouths of normal persons, and the comparatively low incidence of direct contact infections are probably the most important. The majority of healthy individuals are not easily infected, and native resistance to infection is of the same importance in determining the incidence of this disease as is the case in tuberculosis. In some localities, however, and under some circumstances, lobar pneumonia has assumed definitely epidemic proportions, although generally it is to be regarded as an endemic disease.

Isolation of patients with lobar pneumonia, the wearing of masks by all individuals in contact with the disease, and the destruction of sputum and nasal excreta are most important in preventing the spread of the infection, and should be insisted upon in every case. To this end cooperation of physicians in securing the appropriate regulations by health departments, and in carrying out the necessary measures for prevention of the disease is much to be desired. Fortunately virulent pneumococci do not appear to survive long outside of the human organism, and chronic carriers of the virulent forms are certainly most rare, if they exist at all.

In emphasizing the specific etiology and the contagious, endemic character of lobar pneumonia I have not intended to discount the well known factors of age, constitution, occupation, weather, exposure, season, and alcoholism.. They are too well known to require further elaboration here. I cannot refrain, however, from calling attention to the ingenious experiments by Stillman on the latter point, by which he showed that the ability of white mice to resist infection by pneumococci was sharply reduced by alcoholism. These results are quite in keeping with clinical experience.

SPECIFIC THERAPY

The ideal treatment of lobar pneumonia, and the one upon which hopes for the future must be centered, is one which will employ an agent to destroy the pneumococci, inhibit their deleterious actions, or neutralize their toxins. The symptoms of pneumonia are due to the multiplication of pneumococci in the body, and barring accidents, such as fatal emboli, which may occur even during convalescence, the outcome of the disease is almost entirely dependent upon the relation between the virulence of the organism and the specific resistance of the patient. Supportive measures, such as digitalis and oxygen, judiciously applied, and careful nursing are of great importance, but are of no avail in the presence of an overwhelming infection, or in the absence of specific resisting powers on the part of the host. Any marked reduction in the mortality rate in the disease once established can come only through the application of some form of specific therapy. This specific means of therapy might conceivable be

either in the form of a drug or a serum or vaccine.

Some years ago Morgenroth introduced a quinine derivative, which he called "optochin," and which he had found to have a specific bactericidal action on pneumococci in the test tube, and a curative action on pneumococcus infections in animals. This drug offered the promise of an ideal, simply administered, and effective specific therapy in all forms of pneumococcus pneumonia. But when submitted to the crucible of carefully controlled clinical experience it was found wanting. In the human organism the dosage which could be tolerated was limited by the frequent occurrence of deleterious effect on the eyes. In a small proportion of cases total permanent blindness occurred, and in a larger proportion there was transient amblyopia. Unfortunately the dosage which could be tolerated was not sufficient to have any marked effect upon the pneumococcus, or at least upon the course of the disease. While the use of this particular drug has had to be abandoned it leaves some hope for the success of chemotherapeutic measures in the future. Quinine has also been advocated, but has not yet been proven to be of definite specific value.

As might have been expected numerous early attempts were made to produce a serum effective against the pneumococcus in lobar pneumonia. While sera were prepared which would protect animals against infection with the pneumococcus no clean-cut results were obtainable in human cases, and at the time of Dochez's grouping of the pneumococci belief in the possibility of effective serum therapy of pneumonia was at a low ebb. Following the work of Dochez, and from experiments on animals it soon became apparent that an anti-pneumococcus serum was effective only against the specific type of pneumococcus which had been used in preparing the serum. It was believed that the previous failure of serum therapy was in part at least due to a lack of specificity in the measures employed, and specific sera were prepared by injecting the various types of pneumococci into horses. A large number of patients, first at the hospital of the Rockefeller Institute for Medical Research, were then treated with the appropriate sera. Early experiments indicated that such sera might be of value only in Types I and II, and sera prepared against Type III have never been sufficiently promising to warrant extensive clinical trial. The Type II serum did have extensive trial, with the result that it was found to have no appreciable effect on the course of the disease.

In the case of Type I serum in Type I pneumonia, however, the case is quite different. There is now abundant evidence to the effect that Type I serum, administered in sufficient quantities early in the disease is highly effective in the treatment of lobar pneumonia due to the Type I organism. This evidence is partly of the kind usually known as laboratory evidence, but the clinical evidence has been summarized by Wadsworth who concludes that "there would seem to be no question but that antipneumococcus serum of high potency, when promptly administered in adequate dosage, is of definite practical value in the treatment of Type I infections of pneumonia."

In spite of this evidence the use of Type I serum has been very slow in gaining adoption by the medical profession. This is in part due to honest doubt as to the validity of the evidence so far presented, but is even more due to the technical difficulties involved. As we have seen, Type I pneumococcus accounts for only about 35% of the cases of lobar pneumonia, and in these cases the death rate is relatively low, being about 20% in untreated cases, as against 30 to 50% in Types II and III. The diagnosis of lobar pneumonia is often delayed, and after the diagnosis is made there is a further delay amounting under the most favorable circumstances to 8 to 12 hours before the type of infecting organism can be determined. The serum, which to be effective should be given very early in the disease is often not found to be indicated until later, when it may be either ineffective in the severe cases, or unnecessary in the mild ones.

Here an analogy might be drawn between Type I pneumonia and diphtheria. We recognize the importance of administering diphtheria antitoxin early, and we make every effort to differentiate between diphtheria and tonsillitis early in the disease so that the diphtheria patient may have the benefit of early specific therapy. So, ideally, we should attempt to distinguish Type I pneumonia from other types of the disease, in order to treat the appropriate cases early and vigorously. The difference in our own response is in part due, as said above, to the technical difficulties involved, but is also due in large part to the difficulty in recognizing a favorable action of the serum. In diphtheria the favorable effect of antitoxin is usually apparent from bedside observation alone, while the effect of Type I serum in pneumonia can only

be determined by extensive laboratory examinations, and by the analysis of statistics—both of which are likely to leave the physician cold. If a crisis occurs shortly after the administration of serum there always remains the possibility that it was due at that time in any case.

Moreover, Type I serum has not been successfully concentrated, so that large doses of horse serum must be given intravenously. This introduces further complications in the technique of administration, and in the avoidance of immediate anaphylactic reactions, there being frequently the necessity for a further delay for desensitization. Finally there is the almost inevitable serum sickness, which may cause much discomfort to the patient.

From the above it may be seen that the use of Type I serum in pneumonia has not yet reached a stage where it may be easily applied in general practice. In fact the diagnosis and treatment of a single case of Type I pneumonia, in a well-equipped hospital, may easily occupy the entire time, or almost the entire time, of a single physician from the time the patient enters the hospital until the crisis occurs. Granting the effectiveness of the Type I serum, methods must be found for making it available to those who need it—and those methods are not yet available on a large scale.

Naturally efforts have been made to extend the use of specific therapy in pneumonia by avoiding the necessity of determining the type of the organism before initiating treatment, and by using more concentrated preparations. Cole and his coworkers at the hospital of the Rockefeller Institute have not advocated polyvalent sera, for the reason that they have convinced themselves that serum prepared by their methods is of little value in pneumonia due to organisms of Types II and III. Huntoon, however, has prepared an aqueous solution of pneumococcus antibodies which contains protective substances against Types I, II and III, and which has little or no serum protein. This has had an extensive trial by Cecil and others, with beneficial results especially in Type I, as might have been expected.

Felton has also prepared a concentrated solution of pneumococcus antibodies which is receiving trial. It is too early to predict the outcome of these trials, except to say that the value of these preparations will probably continue to be greater in Type I than in other types of pneumonia. The preparations may, however, be of some value in other cases, and may prove to be applicable in the early stages of all types of pneumonia, without awaiting bacteriological differentiation of the type of organism present.

Another preparation which has had more or less extensive trial is the chicken serum of Kyes. Fowls are naturally immune to pneumococcus infection, and Kyes has sought to strengthen this natural immunity by active immunization of chickens, and to transfer it passively to patients suffering with lobar pneumonia. Favorable results from the use of the serum have been reported, but the method has not yet been established as a significant addition to our armamentarium. A number of cases of pneumococcus meningitis, usually regarded as invariably fatal, appear to have been treated successfully with this serum.

All of the above sera and antibody preparations are anti-bacterial, rather than anti-toxic in nature. The recent success of scarlet fever therapy with an antitoxic serum has stimulated the search for toxins produced by the pneumococcus, the existence of which has always been a matter of some doubt. Up to the present the attempts to produce antitoxic sera do not seem to have met with success.

Finally there remains the possibility of successful specific therapy by the use of vaccines. At present this possibility appears to be remote, on account of the slowness with which the immune response appears, although under certain circumstances the vaccine may be valuable as a prophylactic measure. There can be no doubt that favorable results have sometimes followed the injection of vaccines in lobar pneumonia, but these results are now believed to be due to a non-specific reaction, and are in no way dependent upon the specificity of the material employed. In fact there is still some doubt as to whether the favorable results obtained with the Huntoon antibodies and with the earlier preparations of the Kyes' chicken serum may not have been due to the non-specific reactions commonly provoked by the use of these preparations.

SUMMARY

In summary it may be said that the past two decades have witnessed great strides in our knowledge of the specific etiology and the epidemiology of lobar pneumonia, that real advances have been made in the search for specific methods of therapy, and that there is great hope for the future.

Tropical Diseases Frequently Encountered in the Temperate Zone*

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It is an epidemiological aphorism that, for the most part, the communicable diseases of man travel on two legs. In other words, man carries with him his own diseases wherever he goes, in the same manner as yellow fever, malaria and uncinariasis were transported from west Africa to the New World in the bodies of slaves, and measles, tuberculosis and syphilis have been introduced among the Polynesians by modern travellers. So long as communication between peoples is difficult and infrequent, diseases have a tendency to remain localized. An example of this is the blinding filariasis which is confined to a remote narrow strip on the Pacific slopes of Guatemala. When, on the other hand, transportation facilities improve, diseases of one country are carried to another, just as plague epidemics scourged Europe in the middle ages after Venice opened up a maritime trade route with the Near East. For the most part, disease remained relatively localized throughout the world until the capture of Constantinople by the Turks closed overland European communication with the Orient.

In the search for a new oriental trade route which followed, new lands were discovered and new diseases encountered and in this an international interchange of pathogenic micro-organisms occurred, thus starting the world diffusion of many communicable diseases. The rate at which this progressed was directly as the speed and ease of international communication and the opportunity for the various peoples to come into intimate contact. Anything which concentrates and then disperses people contributes materially to this. The pandemic of influenza in the last years of the war with Germany is an illustration of this.

When the study of the exotic diseases began, those which occurred with the greatest frequency in the tropics were called tropical diseases and this caused the physicians of the temperate zone to more or less assume that these infections could not exist north of the tropic of Cancer or south of the tropic of Capricorn. Climate is not wholly a matter of latitude and, unfortunately, those diseases which are spread from man to man without the intervention of an obligate intermediate host have little regard for geography. Even some of those diseases which are transmitted by insects have at times evidenced a supreme disregard for artificial boundaries. Thus, in the past, yellow fever has appeared in epidemic form in Portland, Maine, and in northern Kentucky. We think of the United States as being situated in the temperate zone, yet from the viewpoint of climate, at least half of it is located in the sub-tropics and at certain seasons the climatic conditions are absolutely tropical as far north as the Canada line. It is therefore entirely logical that many so-called tropical diseases should be present in the temperate United States. When we consider the ease and rapidity of communication on our east and south with the tropics of Pan-America and on the west with Hawaii and the Orient, it is seen that it is inevitable that many so-called tropical diseases should invade our territory. That many of these pass unrecognized is not surprising. The medical practitioner in our northern states is not looking for malaria and hence he rarely finds it; prolonged fevers which do not give a Widal reaction or a positive typhoid blood culture are nevertheless diagnosed typhoid fever when an agglutination reaction with the *Brucella abortus* would have demonstrated undulant fever. Unfortunately that disease has been labelled Malta fever and the idea still prevails that it is contracted only by drinking goat's milk. It is not at all uncommon in the northern United States, particularly in cattle from which it is easily transmitted to man. Even those diseases in which heat and moisture seem to bear a relation to propagation and spread, find a favorable environment in this country because our summers are hot and humid and in winter we keep our houses in a condition which closely simulates a tropical climate. The general practitioner is apt to ignore these facts and until we get away from the attitude of mind which limits tropical diseases to the tropics, we will continue to commit diagnostic errors and oversights, sometimes with harm to our patients.

DISEASES OF THE SKIN

Prior to the war with Spain, the epiphytic diseases of the skin were rather infrequent. If the lesion was circinate, it was diagnosed as ring

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worm; if it did not make rings it was called eczema or psoriasis according to its anatomical distribution. Few thought of examining scrapings for fungi and almost never did they culture them. When the returning troops brought back "dhobie itch" which began to spread to the civilian population, it was realized that there was something more to the dermatomycoses than had been thought. That was a generation ago, yet outside of the specialty of dermatology, it is doubtful if many members of our profession realize how very prevalent are these skin infections. Modern life with its swimming pools, public baths, gymnasia and golf clubs—places where large numbers of people go barefooted—and public laundries which do not always practice sterilization afford almost ideal conditions for the spread of the epidermophytons and similar fungi. Tinea cruris, mycotic pompholyx and dermatitis interdigitalis epidermophytica are exceedingly common infections and intractable pruritus and will not infrequently be cured promptly, if a microscopic examination is made and an antimycotic ointment is applied. These infections bring discomfort to patients and lower efficiency, yet of themselves they are not lethal. Unfortunately, they prepare the soil for the streptococcus and hence indirectly menace life.

MALARIA

When our forefathers settled this portion of the country, an ague paroxysm was an every other day occurrence. With the introduction of agricultural drainage, the disease became relatively rare but it should not be forgotten that the Anopheles is by no means extinct in these localities and that individuals suffering from chronic malaria not infrequently migrate into the northern states. These cases are easily overlooked if one does not bear facts in mind. They are, in effect, chronic malaria carriers and, if untreated, may serve to inoculate the local Anopheles and hence to spread the disease. At New Orleans, all types of the disease are almost constantly seen and patients with estivo-autumnal, tertian and quartan types of the infection might just as well be seen in Wisconsin, although naturally, not so frequently. The answer of course is the careful microscopic examination of the blood prior to the administration of quinine. Once the diagnosis has been made, the cure depends upon keeping the patient pretty well saturated with quinine for sometime after the disappearance of all symptoms. For this purpose, nothing is really more effective than the old fashioned liquid quinine which we used in Panama. This is not very pleasant to take but it is far more effective than are quinine pills. The point in administration is to give the drug at regular intervals night and day so that the quinine index of the blood shall be as constant as possible.

INTESTINAL INFESTATIONS

Another tropical infection which is not always thought about is amoebiasis. I have seen cases of the disease in people who have never been outside the United States and I recall a necropsy which I performed several years ago on the body of a patient who had never been away from Missouri until he came to Boston and died. This man had a typical amoebic abscess of the liver. I do not believe that the disease is as ubiquitous as do some observers but, in all obscure forms of intestinal disturbance, would urge the careful examination of the stools by a competent parasitologist. In this connection, it may be pointed out that uncinariasis, *trichocephalus dispar* and several of the tropical tenia are far more common in the temperate zone than has hitherto been thought. *Tenia nana* is one of these and is a disease for which pediatricians should always be on the lookout. A surprisingly large number of intestinal infestations will be discovered if the stools are carefully examined routinely. In certain portions of the northern United States, the liver fluke, *Opisthorchis sinensis,* is beginning to appear, probably by importation from the Orient. Schistosomiasis, of both the urinary and fecal varieties, is also occasionally met. There may be cases which are relatively symptomless and which are discovered only in the course of the microscopic examination of the feces. In dysenteries of obscure origin, the feces are sometimes found to contain the characteristic eggs. Tartar emetic is about the only drug which seems to offer the hope of cure.

Filariasis occurs in this country in several situations in which high temperatures with high humidity are characteristic of the climate. The transmitting agent is the mosquito, *Culex fatigans,* in the nocturnal variety of the disease, and in the diurnal form, the *Stegomyia pseudo-scutelleris,* a day feeding mosquito, carries the infection. In doubtful cases, examination of fresh blood should be made at night as well as by day.

PULMONARY INFECTIONS

A surprisingly large number of cases of pul-

monary infection, characterized by loss of weight and profuse expectoration, are being diagnosed as tuberculosis and yet the tubercule bacillus is not found. In a certain proportion of these, a dark-field examination of the sputum reveals the presence of a spirochete, frequently of the Vincent's type. These patients linger along and finally die of pneumonia unless they are diagnosed and treated. Bronchial spirochetosis is probably a much more common disease than is imagined. These patients do very well if they are put to bed and given salvarsan in small doses. They must be watched carefully as almost all of them begin to lose weight soon after medication begins. The patient's treatment should be checked carefully against the dark-field findings. Recovery in these cases is usually slow but, with careful watching and patient treatment, is usually complete.

Granuloma inguinal, a disease first described by practitioners of tropical medicine, is not at all uncommon in the United States, particularly among the colored race. This is a terribly mutilating disease and may cause death by invasion of the abdominal cavity. The suffering which these patients undergo is truly pitiful. Local applications, actual cautery, surgical intervention are all without avail. Antimony seems to be the specific for this disease either in the form of tartar emetic or sodium thio-glyco-tartarate. Great care must be observed lest antimony poisoning be produced and the treatment must be persisted in until recovery is complete. Early cases respond quite promptly; late cases are apt to be very tedious and difficult to cure. Diagnosis may be made by the characteristic lesions on the genitals and in the groin and the discovery of the Donovan bodies which are believed to be the causual agent.

All of us have seen cases of mild persistent inguinal bubo in which the patient denies all venereal exposure and states that the condition followed a muscular strain of some sort. When these buboes are opened, they are found to be sterile. The patient has little or no temperature and presents himself for treatment by reason of the discomfort coincident to the presence of the bubo. This is a condition which was first seen in the tropics and which, for want of a better name, was called climatic bubo. It is very doubtful if climate or infection have anything to do with these cases. Rubino studied 150 consecutive cases of this sort at the U. S. Marine Hospital in New Orleans and came to the conclusion that these buboes are probably traumatic in origin. In practically all cases there is a history of an unusual physical exertion, especially that of forcible flexion of the thigh upon the abdomen. Complete enucleation of the gland is about the only thing which really does any good and when this is done, recovery speedily follows. In the past most of us have unwittingly done an injustice to such patients by labelling them as having a veneral infection and as being untruthful. This may be of great importance in compensation and industrial cases.

Typhus fever is not a frankly tropical disease but certainly, most of us regard it as exotic. Yet under the name of Brill's disease, it is almost constantly present in New York City. We are apt to think of it as spread solely by lice, yet recently a good many cases have been reported in the South in the well-to-do, bathtub classes. This has given rise to the suspicion that there is some other vector than the louse. The epidemiology of typhus is far from being worked out. When diagnosing a maculopapular eruption, typhus should always receive consideration, the Felix Weil reaction being performed.

A good deal has been written in recent years about the prevalence of smallpox in the United States due to the carelessness and prejudice of the lay public with regard to vaccination. The type of smallpox which exists at present is the tropical or alastrim type. This is a mild infection conferring immunity against true smallpox and usually marking the patient very little. If this was as far as the matter went, it would not be so serious since, as a rule, only the very young and the greatly debilitated are killed by this infection. The great menace, however, lies in the fact that none of us know when it may become virulent and take on the hemorrhagic or the confluent type. In treating unvaccinated persons, alastrim should always be kept in mind and vaccination should be preached and practiced at all times. In this connection, it may be pointed out that if practitioners of medicine will adopt the pressure-prick method of vaccination and regard this apparently simple operation as an affair meriting very careful attention, vaccination will become more generally popular.

This paper cannot be brought to a close without mentioning leprosy, an infection which, properly speaking, is not necessarily tropical but which all of us are inclined to regard as at least exotic. Few of us fully sense the extent to which this dis-

ease exists in America. The federal leprosarium at Carville, La., has patients from practically every state in the union and there are many, many more lepers at large than there are under treatment. It is surprising how easy it is to overlook cases of this disease unless one is thinking of it. The earlier such cases are diagnosed and placed under treatment, the greater are the chances of amelioration and perhaps cure. Apparently, the medical profession is now diagnosing more cases before they reach the stage of extensive mutilation. The number of voluntary commitments to Carville is increasing. This is the ideal method in that it avoids legal procedures and attendant undesirable publicity. If patients and their families can be made to realize that the government is operating a splendid leprosarium at Carville where patients receive expert humane treatment in the best possible surroundings and if physicians will be prompt to recognize the disease, the number of cures will be increased, the spread of the disease will be checked and many unfortunate individuals will be spared needless public humiliation, mutilation and suffering.

SUMMARY

What has been said in this paper may appear to be an arraignment of the medical profession of the temperate zone. It is far from that. The average physician cannot be expected to make a differential diagnosis between Madura foot and a leprous perforating ulcer of the foot. He can, however, recognize that he is dealing with what to him is an unusual and exotic disease and take steps toward accuracy of diagnosis and treatment. It is sincerely hoped that this paper will drive home the fact that the so-called tropical diseases are not necessarily tropical and that as air communication is opened up between the United States and the tropics, we may expect to find more and more so-called tropical infections, many of which already exist in the temperate zone. In other words, the scope of the practice of medicine is being increased by modern methods of transportation and the list of diseases which the practitioner of the temperate zone must exclude before arriving at a diagnosis is being materially augmented. From the public health point of view it is exceedingly important that these infections be recognized promptly and that appropriate measures for the prevention of their spread be instituted. We no longer live in isolated security from the diseases of other countries and the medical practitioner who would make accurate diagnoses and effect brilliant cures must be ever alive to the possibility of these infections.

DISCUSSION

DR. GILBERT SEAMAN (Milwaukee): The message which Dr. Rucker brings to us, I think, is of great importance. It has been recognized in many countries, notably in England and in France, that we can no longer, as practitioners in the temperate zone ignore the importance of so-called tropical diseases, which as Dr. Rucker points out, are not tropical diseases, because disease does not respect geographical lines. This would be impressed upon one by a visit to that wonderful museum, the Welcome Museum in London, in connection with the London school of public health, where it can clearly be seen that all forms of disease, supposedly tropical and sub-tropical, occur in and about London.

Not long ago I had an interview with Dr. Holmes of Chicago, who is an associate professor of medicine at Northwestern, with whom many of you are doubtless acquainted. Dr. Holmes has recently had this experience at one of the hospitals in Chicago. They began to recognize the fact that they were having an unusual number of cases of a peculiar disease, peculiar to them. They finally came to the conclusion that they were dealing with the so-called tropical disease of sprue. Many of the practitioners of Chicago would not recognize the fact that it was sprue, but many of them were impressed with the fact that it was indeed sprue, and Northwestern University arranged to have Dr. Holmes go to Porto Rico to Dr. Ashford's institution there and study the disease, sprue, with the result that many cases are now being recognized in Chicago. I have no doubt that there are many cases of sprue throughout the entire country, because it is not uncommon in Chicago.

At New Orleans they have a wonderful department of tropical medicine, because New Orleans is a seaport, where diseases are brought from other ports, from other countries. And for many years they have been interested in New Orleans in the tropical and sub-tropical diseases. It is very interesting to visit the clinics of New Orleans and observe the difference between the run of diseases, so to speak, there and compare it to other parts of the country.

Dr. Rucker is in a fortunate position to bring to us the results of his practical observations in that great United States Marine Hospital at New Orleans. For one, I appreciate very much his coming here and his presentation of the subject. (Applause.)

DR. EDWARD EVANS (La Crosse): It might be well, before the meeting of the Wisconsin State Medical Society, to emphasize the possibility of a wider prevalence than we dream of in the state of Wisconsin of one of the diseases referred to by Dr. Rucker. That is the disease of abortus melitensis.

Recently there came into our hospital, under the care of my son, a case that looked like walking typhoid fever. There was negative Widal, and it was important to find out just what he had. A careful history, which is always so important, revealed the fact that this farmer had recently had some five or seven of his cows abort.

He had taken care of them, and a test made showed that it was undoubtedly this disease. I think in many of those cases which are walking about we do not always diagnose correctly. That which looks like walking typhoid but which is not may possibly be the cause of the great prevalence of abortive disease in herds, due to this disease. Probably it is very much more prevalent than we think. I thought it was worth while drawing your attention to the fact that we have it in Wisconsin and may have it very much more prevalent than we dream. (Applause.)

Sanatoria; Do They Justify Their Existence*

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The answer to the question, do sanatoria justify their existence is, in our opinion, decidedly in the affirmative. The certainty of the position taken is based upon careful consideration of a quarter century of sanatorium history taking into account the nature of the disease, the dispositions of persons affected, advancement of medical education occasioned thereby and the beneficient results to patients and the community obtained through the operation of institutions erected and maintained for the care and treatment of the tuberculous sick. Ever since the discovery of the tubercle bacillus by Robert Koch in 1882 the disease then commonly known as consumption has been universally accepted as an infectious, communicable disease. It will be remembered that the incidence and mortality rate was formerly so high as to suggest the titles, "The Great White Plague" and "Captain of the Men of Death." So-called "cures" became the order of the times, but aside from the scientific study of the bacillus and the increased interest in the pathology of the disease, occasioned by the discovery of its specific cause, little or no success attended efforts directed toward control until the advent of the sanatorium; a place providing facilities for instituting the first and most important procedure in the control of any and all infection, namely, isolation. The importance of this factor in our fight against tuberculosis cannot be overestimated. Sir Edward Newsholme after a most exhaustive study of the results of isolation in tuberculosis made the following statement, "If you will isolate 20% of the open cases of tuberculosis in any community for a period of four months each year, the death rate from the disease will show in that community a yearly decrease of 2%." The marked decrease in the death rate from tuberculosis in the states affording the greatest number of sanatorium beds appears to bear out the truth of the deduction of Newsholme, and emphasizes the basic indispensable value of the sanatorium as perhaps the greatest factor in the reduction of the death rate from 202 per hundred thousand in 1900 to approximately 87 in 1926. It is significant that during this period of time the number of sanatoria have increased from 42 to 700 and the number of beds from 3,600 to 73,000. The evils resulting from permitting an open, infectious case of tuberculosis to remain in the home is known to every tuberculosis worker and has been statistically corroborated time and time again. The recent findings of Parisot and Saleur in France show among 367 children from homes harboring open infection, 42% of children under 2 years of age, 82.5% under 5 years and 91.5% above 5 years were positively infected.

Corresponding percentages from families free from exposure showed no infection below the age of two years, only 8.7% below the age of five and but 44% above the age of five. Opie and McPhedran, after an exhaustive study of conjugal tuberculosis, conclude that the great majority of the mates of tuberculous husbands and wives in home environment develop symptoms of an active implantation of tuberculosis and Calmette tells us that fully 25% of infants from tuberculous mothers perish during the first year of life. Aside from all other considerations the factor of isolation afforded by our institutions amply justify their existence and are indispensable to success in the campaign against tuberculosis.

THE INDIVIDUAL PATIENT

Experience seems to show that the sanatorium offers to the individual patient his best possible chance for an ultimate recovery. With the multiplication of sanatoria the increased opportunities for group as well as individual study and for the development of specially trained personnel has come a better understanding of the disease and a more scientific application of cure-promoting measures. In the treatment of no other disease have so many and varied factors been found to be essential therapeutic considerations as obtains in the treatment of tuberculosis. Special conveniences

*Read before Mississippi Valley Conference on Tuberculosis, Des Moines, Iowa, September 18, 1928.

for the application of hygiene making certain a constant supply of pure fresh air, proper and sufficient food, medically prescribed rest and graduated exercise, all basic requirements, are possible of procurement to but very few patients outside the sanatorium. It is contended that the key to success in the use of the above named factors is in the final analysis not so much a matter of their availability as the intelligence with which they are used and the perseverance with which these factors are applied. It is a notorious fact well known to all physicians treating tuberculosis that the natural tendency of persons suffering from this disease is to compromise in the matter of cure taking. Health discipline is therefore of paramount importance and nowhere possible of satisfactory enforcement for the rank and file of patients outside a well organized and conscientiously administered tuberculosis sanatorium. It is here that we find a medically prescribed and continuously supervised daily program of living, not difficult of acceptance because all patients are following practically the same routine, and with no distracting interruptions. Herein is found the school atmosphere where by precept and practice health promoting habits are formed under the guidance and supervision of physician and nurse. Here, too, continuous encouragement in well doing and gentle reproof for wrong doing lend moral support to the battler in his long drawn out fight against an insidious disease.

Through group study of the various pathological manifestations and conditions found in patients housed in sanatoria has come an individualization of the scientific medical and surgical treatment of the disease. Excepting in the more acute, rapidly progressive types of tuberculosis, constituting as they do but a small minority of cases, there exists at some time a most propitious moment for the introduction of more or less radical measures that give promise of turning the tide in favor of the patient. The well equipped and organized sanatorium offers the facilities for seizing this opportunity. Accurate and complete records, laboratory reports, physical findings, an accurate knowledge of the psychic attitude of the patient, all combined with the advantage of every convenience for carrying out the indicated medical or surgical procedure makes possible the most scientific care and therefore the most promising results. Among the various therapeutic measures at our command, potent for good or ill dependent upon wise choosing, timing, and correct application may be mentioned, artificial pneumothorax, phrenic nerve block, thoracoplasty, helio- and chemotherapy. Each possesses decided life-saving value when used at the right time and in the right way, determinations not so easy of accomplishment outside a well ordered sanatorium. And so it is contended that from the standpoint of treatment, sanatoria justify their existence through the saving of human lives otherwise lost by reason of the inadequacy of treatment of admistration in the homes of patients.

EDUCATIONAL CENTRE

A casual inspection of any one of the many successful institutions will impress the observer at once with the fact that school days are not a matter of history for patients received therein. Intensive training in matters of personal hygiene and sanitation not only as cure-taking procedures but as a protection to others, is immediately begun and continues during the entire stay of the patient. Because of the personal nature of the subject studied, patients become acquainted with the simple truths concerning tuberculosis, its prevention and cure, and through them valuable information reaches the family and community. The statement made in an earlier day that "much tuberculosis is due to ignorance" is fast losing its applicability as a wholly truthful assertion thanks to the popular educational campaigns of our national and state associations, not forgetting the exceeding value of the support given through the testimonials of thousands of sufferers from the disease who have found relief, cure, and accurate knowledge in a course of sanatorium cure-taking.

With rapid progress made in the fields of scientific medicine and surgery as relates to tuberculosis which by the way has paralleled the increase in numbers of sanatoria, the medical and nursing professions have come to regard tuberculosis as a disease worthy of special attention and interest. It is not so long ago that the profession considered this disease to be well nigh hopeless and of interest only as a study in pathology from date of diagnosis until death. Today we find general practitioners diagnosing tuberculosis in its early stages, medical schools featuring special attention to its study and rotating groups of senior class students through the sanatorium for a course of practical experience in diagnosis and actual sanatorium treatment; we find medical graduates as applicants for interneship ready to consider a residence in a modern,

well equipped sanatorium, and medical men from out of general practice, seeking the proficiency that will warrant the title "tuberculosis specialists." So again sanatoria justify their existence as centers of education, promoting the general welfare of patient, family, community, state and nation by insisting on improved hygiene and sanitation and making possible the rendering of a more efficient medical service.

Lastly, and of equal value sanatoria operate as an economic factor in community administration. Tuberculosis, while no respecter of class or caste, is essentially a disease of the poor. The chronic nature of the ailment, requiring months and years of strict attention to the business of getting well, makes its proper treatment an expensive undertaking, prohibitive to the great majority of sufferers from this disease. Cared for in the home, aside from the compromise made in the matter of actual treatment and disease prevention, the presence of sickness in the family is disorganizing in the extreme, impels sacrifices that continued for any length of time tends toward further difficulties, and finally multiplied dependency. The sanatorium removes the family burden, releases care takers for normal duties and indirectly promotes independency and family integrity, both allies in our campaign against tuberculosis. It is believed that if every person with active tuberculosis were cared for at public expense the resulting rapid decrease in the incidence of tuberculosis and diminution of dependency in our communities would more than justify the outlay of money expended for the purpose.

Included in the economic consideration of the question must not be forgotten the exceeding value of our occupational therapy departments. This innovation to sanatorium treatment conserves personal ambition for useful citizenship, preserves the inclination for useful labor and changes the picture upon discharge from that of a healthy industrial invalid into a self-respecting self and perhaps family supporter. Occupational therapy is deserving of wider application in all our institutions and adds weight to our most decided answer to the question, "Yes, sanatoria do justify their existence and represent the basic influence for success in the eradication of what was formerly known as the Great White Plague and Captain of the Men of Death."

Studies on the Cultivation of Human Tissue Outside the Body*

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A few investigators have attempted to grow human tissue in vitro. Their results for the most part have been negative. One can safely say that no real growth was obtained, but in most instances there was observed a mere survival of the cells cultivated. Tissue culture, as it should be understood, involves not only the survival of cells in a given tissue culture medium, but also the building up of new protoplasm from the constituents of the culture medium. In the available literature there are a few reports on the cultivation of bits of human tissue, where the tissue cells which emigrated from the fragment were seen to be actively motile for periods upwards of a month or more. These are not examples of tissue culture in its strictest sense, for in no case was there observed a degree of growth such that it would be possible to obtain several fragments (subcultures) from the original fragment. To accomplish this, substances must be supplied in the medium which will serve as utilizable sources for the building up of new protoplasm by the cells cultured.

Very soon after the inauguration of tissue culture work, which began with the researches of R. G. Harrison[1] in 1907, it was found that embryonic juices contained substances, or a substance, which could bring about the continued growth of autologous embryonic tissue cells for indefinite periods of time. Thus, it was possible for Carrel and Burrows (and later Carrel[2] and Ebeling, who continued their earlier work) to culture embryonic chicken fibro-blasts for a period of over 16 years. Since then, using similar methods, the same workers and others have reported the growth of other embryonic and some adult animal tissues for periods of time long enough such that one could safely say that they could have been cultivated indefinitely. More recently it has been found that proteoses and extracts of tissues other than embryonic tissues are sources of food for particular types of cells.

In our earlier work, about five years ago, when we first attempted to grow human tissues, we realized that the scarcity of human embryonic

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material prohibited its use as a source of food for cells in culture. Some previous work[3] hal led us to try extracts of the placetena, which is made up for the most part of embryonic tissue, as a source of tissue culture nutrient. We had found that an extract of the mouse placenta was a good medium for the cultivation of the cells of the sarcoma 180, a transplantable tumor of the mouse. In these experiments, homologous placental extract was found to stimulate growth almost as good as homologous embryonic extract. On the basis of these observations, we attempted to grow human tissue in media containing different kinds of extracts and different kinds of digests of human placentae. In a series of experiments carried out over a considerable period of time, it was found that some of these extracts were fairly good sources of food for certain adult human cells. Cultures of normal and of hyperplastic thyroid tissue could be kept actively growing for over 4 months. Similar results were obtained with cultures of human embryonic tissue. In later investigations[4] on the viability of the cells of the decidua menstrualis it was found that media containing placental extract could maintain fairly active cultures of these cells, as well as cultures of normal endometrial cells. Fairly good cultures of human sarcoma and carcinoma were obtained in similar media, but none survived much more than a month.

One of the great difficulties in the culturing of human adult tissue, and especially malignant tissue, is the fact that these cells are capable of digesting human and most mammalian fibrin with considerable rapidity. When cultures are prepared containing autologous human plasma in varying concentrations, they are found to be liquefied by the fibrin ferments of the cells sometimes within 24 hours. Cultures of sarcoma and carinoma cells of animals as well as man have been found by all those who have attempted to grow them to be particularly active in this regard. Such being the case, it became practically impossible to get good cultures in strictly homologous solid media. Without a fairly indigestible, supporting network, the culture fragments would round up, hang free in the liquefied droplet of the medium, and after several transplants eventually peter out. Dilution and the addition of cord serum and other normal sera did not prevent liquefaction sufficiently. The use of sodium linoleate to inhibit fibrinolysis was not tried. To overcome this difficulty we sought a different source for the essential element, fibrinogen, which is the precursor of the fibrin coagulum of the medium. The use of avian plasma had been recommended by Lambert and Hanes[5]. Media containing certain concentrations of chicken plasma were found to be less easily digested, thus permitting a longer period of cultivation without liquefaction of the medium. The use of bird's blood plasma was found to be particularly advantageous, in that it could be stored for long periods of time. In collecting it, care had to be taken that it be chilled immediately, and thereafter kept cool and sealed to prevent loss of CO_2. The stability of bird's plasma is due to the fact that there are few or no platelets in it. Human plasma collected under precautions as strict as these sometimes clots before it is completely separated by centrifugalization. We found that by adding heparin to human blood so as to make a final concentration sometimes as low as 1-150,000 will render the resulting plasma quite as stable as bird's plasma without heparin. Graucin[6] has since reported its use in keeping plasma fluid and stored for tissue culture work.

Even though the results with media containing chicken plasma, placental extract, cord serum, and a balanced physiologic saline were very gratifying, the cultures obtained were not quite equal to those obtained when homologous embryonic extract was used. Our efforts were then concentrated on the possibility of using heterologous embryo extract as a source of cell food. No other substances up to that time had been discovered which were superior or as good as embryo extract or specially prepared precipitates of it. Media containing extracts of chick embryos were found to maintain cultures of embryonic human tissues in active growth for over a month, but the subcultures became extremely vacuolated and finally died. This occurred in spite of the careful maintenance of a physiologic hydrogen ion concentration. Extracts of pig embryos were found to be even more suitable, some cultures lasting 2 to 3 months before they died. When extracts of fresh beef embryos (approximately 1-2 months old) were tried, excellent cultures of embryonic human cells were obtained. In a period of 7 months we were able to obtain nine generations of human embryonic fibroblasts from different tissue sources and mixed cultures of embryonic epithelium and fibroblasts. Since then, using similar media, we have obtained excellent cultures of adult fibroblasts obtained from bits of voluntary muscle.

Although we have had remarkable success on the whole in developing methods for growing normal adult tissue in vitro, we cannot say that they are the best. The use of proteoses prepared from various proteins has to be given an extensive trial. They have been reported[7] to be better sources of cell food for some cells than embryonic extract or its derivatives. Whatever the true nature of this activating substance may be, investigation thus far indicates that it is either a proteose or polypeptid obtained by a partial hydrolytic cleavage of proteins. Peptic digests yield these substances at a certain stage in the hydrolytic cleaveage of the protein by the enzyme.

We have made many attempts to grow human malignant cells in many different kinds of media, but with only a fair degree of success. The fact alone that they grow fairly rapidly in the most susceptible host as compared with the most rapid growth of normal cells in tissue culture would alone point to the fact that the media in which we have attempted to grow them is either deficient in the necessary food-stuffs that they require, or contains substances which markedly inhibit their growth. It is just as possible that either or both are true. Some seem to think that it is a question of furnishing the proper nutrient. The brilliant researches of Carrel and Baker,[8] who have shown that ordinary serum contains lipoids and albumins that are distinctly inhibiting to the growth of cells in tissue culture would tend to give strength to inhibition factors as playing a role.

By very delicate and special technics pure strains of sarcoma and carcinoma cells of the mouse and rat have been cultured for fairly long periods of time by several investigators. We have used the same methods in attempting to grow human malignant cells, but without success. Nevertheless, perhaps somewhat similar methods may prove successful.

The applications of these very specialized technics of tissue culture (and especially of human tissue culture) to the problems of human pathology are practically unlimited. We are beginning to realize more and more the need for these methods in the study of the physiology and pathology of living cells.

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Meningococcus Meningitis; Treatment by Combined Cisternal and Lumbar Medication*

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Literature reports varying percentages of recoveries in the routine treatment of meningococcus meningitis by intravenous and intralumbar methods. (Dunn, 1911; Netter, 1911; Nowland, 1916; Stewart, 1917; Foster, 1918). Our records are based on no one type of treatment. The results are dependent upon a combined intramuscular, intravenous, intralumbar and intracisternal administration of serum. Each case received an initial intramuscular and intravenous injection on entrance, followed by successive or alternating daily cisternal or lumbar treatment as the clinical picture warranted. The records show that routine administration of antimeningococcus serum by lumbar puncture has given gratifying results only in early cases. In late cases the mortality rate has been very high, and in those patients who survive, hydrocephalus and other serious sequelae are comparatively common. Discouraging results are most often due to subarachnoid or ventricular block, i. e., the lumbar region is occluded from the secreting ventricular plexus, most frequently by beginning adhesions in the region of the fourth ventricle, or lower in the vertebral canal.[1] This fact may be noted in the small amount of fluid removed by lumbar puncture, whereas a cisternal puncture performed at the same time would show fluid under marked pressure with a greater cell count.

It is my purpose to emphasize the value and safety of combining cisternal and lumbar treatment as a routine procedure. The cisternal puncture may be performed with a minimum risk in infants as well as adults. The technique is based upon the same principles.[2]

The site of the puncture is above the spinous process of the epistropheus where the finger can

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penetrate the deepest. The depth of the puncture is dependent on age and nutritive condition of the patient. In well developed and well nourished children below one year of age, the cistern may be reached at 1½ to 2 cm.; in those above one year of age at a depth of 2 to 3 cm. It is advisable to feel the puncture of the membrana atlanto-occipitalis with the finger. The needle should be directed below the occiput directly toward the membrana atlanto-occipitalis. The puncture is usually made in the lateral posture. Anesthesia is not necessary.[3] Stewart reports a series of thirty-three children, the ages ranging from seven months to twelve years with no harmful sequelae such as headache, pain in the face, dizziness, or nystagmus.

Over four hundred cisternal punctures have been performed by the writer without any ill effects. As an added point of interest the following psychic test might be mentioned: At one time twenty-two adult meningitis patients were on the ward. These patients were interrogated after having had a lumbar and cisternal puncture as to which they preferred, and without exception they all chose the cisternal. It permits of immediate access to the site of infection, rapidity of treatment; and overcomes the question of subarachnoid block. The advantage of this treatment merits its use; and combined with lumbar is the usual method of choice.

Peet[4] states that Ayer has shown that without spinal block 1 c. c. of serum introduced by lumbar puncture does not reach the cisterna magna during the period of injection. Likewise 30 c. c. of India ink injected into the lumbar subarachnoid space of a cadaver barely blackened the base of the brain. In contrast to these findings, the introduction of a similar amount of India ink by cisterna puncture stains the entire cerebral cortex as well as the basilar cistern. Since the meningococcus reaches the cerebral subarachnoid space by way of the naso-pharynx and involves the spinal canal secondarily, it seems logical to introduce the curative serum by a route that will insure the maximal concentration and maximal distribution over the areas first infected.

Donthwaite[5] cites a case of pneumococcus meningitis, finding greater relief from cisternal than lumbar drainage. The above authorities have placed sufficient evidence in literature to have warranted the method we have carried out. The puncture of the cisterna magna has given an optimal route in the administration of the antiserum and is a safe and most efficient procedure in the hands of those who understand the anatomy of the region. No clinical type of case presented caused interference with cisterna punctures. The most exaggerated opisthotonos met with no failure, whereas attempts at lumbar puncture on two occasions necessitated a general anesthesia.

The cases reported in this article were all of epidemic meningococcus meningitis, verified by direct smear, or cultural growth. We have eliminated cases on entrance for diagnostic puncture that were either tuberculous, streptococcus or staphylococcus meningitis, or meningismus.

CASE SUMMARIES

Out of 69 cases of meningococcus meningitis there were twelve deaths and fifty-seven recoveries or a mortality rate of 17.4%. The fulminating cases that died within a few hours after entrance are not included. These cases did not permit of intensive treatment or study. The chart record shows a proportionate percentage of serum distribution as follows: 18.68%, intravenous, 24.45% intramuscular, 23.64% intralumbar, and 33.23% intracisternal. The average total amount of serum given was 190 c. c. for each patient. The average number of spinal punctures was ten with an average of five lumbar and five cisternal for each patient.

Regardless of a provisional diagnosis of meningitis or whether the puncture is for a diagnostic purpose, the operator should have serum in readiness for injection. The turbid or suspicious looking fluid warrants treatment before a laboratory report. We gave serum on daily punctures until the spinal fluid became clear and smears were negative. After four to five punctures, when the symptoms were ameliorated, forty-eight hour intervals were resorted to. After three or four forty-eight-hour intervals of treatment a three-day rest period was maintained and then followed by a drainage puncture, with smear, cell count and cultural growth. Now and then a patient would suffer a chill, fever and marked rigidity during the rest period of seventy-two hours. This situation demanded immediate intensive treatment, the same as on entrance. Occasionally a persistent cell count of 1,000 or over with positive smear demanded a change of serum. It may be of interest to comment that we did not use the serum of any particular biological firm. Much rather we used serum from five different manufacturing firms and have no particular preference. This in-

Serum Given						Number of Punctures			
Case	Intravenous c.c.	Intramuscular c.c.	Lumbar c.c.	Cisternal c.c.	Totals c.c.	Lumbar	Cisternal	Totals	Result L. D.
1	0	0	110	30	140	5	2	7	+
2	105	0	140	115	360	6	13	19	+
3	65	0	10	75	150	3	10	13	+
4	0	15	15	93	123	4	7	11	+
5	0	35	15	40	90	1	8	9	+
6	0	40	30	65	135	4	7	11	died
7	40	0	0	47	87	0	7	7	+
8	70	15	40	60	185	2	7	9	+
9	0	0	60	135	195	1	8	9	+
10	0	0	40	15	55	2	2	4	+
11	40	25	0	165	230	1	9	10	+
12	0	20	0	120	120	4	5	9	+
13	20	0	30	55	105	1	2	3	died
14	45	0	25	160	230	7	7	14	+
15	125	0	30	15	170	8	6	14	—
16	60	0	30	88	178	14	5	19	+
17	80	0	210	20	310	8	2	10	—
18	105	0	30	28	163	6	2	8	—
19	60	0	150	125	335	10	7	17	—
20	60	0	70	15	145	8	1	9	+
21	85	0	100	28	213	5	3	8	+
22	55	0	160	75	290	9	3	12	+
23	20	0	30	30	80	2	3	5	+
24	110	30	0	256	396	0	14	14	+
25	30	0	75	0	105	4	0	4	—
26	15	40	0	128	183	4	7	11	—
27	15	0	0	196	211	1	10	11	+
28	0	30	0	98	128	3	6	9	—
29	0	30	0	0	30	3	1	4	+
30	30	60	0	60	150	1	5	6	died
31	15	30	95	15	155	10	2	12	+
32	30	60	70	78	238	7	6	13	+
33	0	0	37	15	52	5	2	7	—
34	0	32	10	25	67	4	2	6	—
35	30	45	0	30	105	2	2	4	died
36	0	45	12	68	125	2	4	6	died
37	45	145	110	35	335	11	4	15	—
38	145	140	105	25	415	12	3	15	+
39	15	45	15	0	75	14	0	14	+
40	38	20	27	20	105	3	2	5	died
41	135	15	77	15	242	7	3	10	+
42	120	10	43	47	220	4	3	7	died
43	0	65	0	32	97	1	3	4	died
44	45	30	0	81	156	1	3	4	died
45	0	90	37	15	142	5	2	7	—
46	45	450	165	0	660	12	4	16	+
47	120	0	20	0	140	5	1	6	+
48	0	250	30	27	307	9	3	12	+
49	30	120	30	0	180	3	2	5	+
50	0	130	60	5	195	6	2	8	+
51	0	120	75	20	215	4	2	6	+
52	0	150	195	45	390	8	6	14	+
53	30	120	110	0	260	4	1	5	died
54	0	70	20	122	212	1	9	10	+
55	0	60	55	37	152	2	2	4	+
56	0	60	0	70	130	1	4	5	+
57	0	60	12	102	174	2	11	13	+
58	0	200	50	145	395	6	13	19	died
59	15	90	30	70	205	4	12	16	+
60	45	30	30	40	145	3	2	5	+
61	15	40	55	254	364	8	21	29	died
62	15	30	30	120	195	3	10	13	+
63	70	15	0	105	190	5	8	13	+
64	0	30	0	80	110	4	10	14	[illegible]
65	25	20	15	30	90	4	3	7	[illegible]
66	15	30	25	110	180	5	8	13	+
67	0	30	15	55	100	3	5	8	+
68	70	15	15	60	160	3	8	11	+
69	105	0	30	30	165	4	3	7	+
O/O Totals	18.68	24.45	23.64	33.23	100.0	47.4	52.6	100	L. D. T.
Totals	2453	3212	3105	4365	13,135	324	360	684	57 12
Average Serum	35.55	46.55	45.	63.26	190.3	4.69	5.21	9.9	

ference is derived from observation of the hospital days for patients having certain serum and the average is about the same for all.

Of interest were the complications occurring during the convalescence. The chart indicates that twenty-eight suffered serum allergy. At no time did the question of serum reaction cause us to hesitate in the energetic use of anti-meningococcus serum. Anaphylaxis was controlled with the constant use of atropin and adrenalin.

We are including one postmortem report of a recurrent type of case that had thirty-five hospital days before death.

POSTMORTEM INTERNAL EXAMINATION

The vault of the skull measured 172 mm. by 115 mm. by 125 mm., the frontal and occipital bone each measured 4 mm. in thickness; sutures were present.

The brain was flabby; the gyri were flattened; the sulci were obliterated. The surface was reddened due to injection of the blood vessels at the base of the brain. The subarachnoid space, particularly surrounding the pons varolii, and the cerebellar hemispheres, contained a yellow, gray exudate, fibrinous in appearance, which partially extended into both sylvian fissures. The choroid plexi were congested. There was a bilateral marked internal hydrocephalus with a softening and injection of the ependyma. The brain ventricles contained a cloudy fluid. The brain substance was highly edematous and hyperemic. The hypophysis was hyperemic.

Complications:

Synovitis left knee	2
Cystitis	1
Urinary retention	3

Total loss of hearing	3
Furunculosis	3
Arthritis	14
Broncho pneumonia	2
Iritis	2
Bilateral parotitis (non specific)	1
Otitis media suppurative	1
Serum allergy	28

Summary:

1. Intensive treatment of every case of meningococcus meningitis with intramuscular, intravenous, intralumbar, intracisternal treatment gave a mortality rate of 17.4% in 69 cases.

2. There was an average equal number of cisterna magna and lumbar punctures performed on each case.

3. It is imperative to perform a cisternal puncture overcoming the possibility of a subarachnoid block on every case of meningitis.

4. Cisternal puncture is the optional route for draining and introducing serum to the site of infection.

5. Cisternal treatment is more simple than lumbar in critical cases, and its application more readily carried out than lumbar puncture.

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THE JOURNAL CLINIC

Diagnostic Problems

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A laborer, 38 years old, complained of pain in stomach after eating, indefinite pains over body, no special loss of weight. Positive findings were Pottenger's sign, slightly impaired note, suppressed breath sounds at left apex, very positive intradermal O. T. reaction, and hazy left apex. This is the sort of case whom the doctor sees frequently and only too often a superficial examination is made and nothing abnormal is found. This is not strange when one considers how exceedingly careful the examiner must be in order to detect the very slight deviations from the normal. The important point is that the doctor must be able to find the slight abnormalities. When a disease has reached the stage that its presence is patent to any one who looks at the victim, the time has long past when any therapeutic measure is available to alleviate the ravages, much less cure the disease.

Attention has frequently been called in these columns to such cases as this one, for the writer has a conviction that too many men and women are allowed to drift along with diagnoses of anemia or nervousness or acid stomach who should be diagnosed correctly and treated properly. This is an old story oft repeated but the lesson it teaches is so important that it bears repetition. What possibilities are in this series of symptoms and signs? There are quite a few because many diseases in their beginnings cause only indefinite malaise with no localizing symptoms or signs. Suppose we list a few, bearing in mind the age of the individual for age determines to great extent the kind of disease. (1) Gastric or duodenal ulcer; (2) pernicious anemia; (3) Hodgkin's disease; (4) leukemias; (5) chronic focal infection; (6) hyperthyroidism; (7) hypothyroidism; (8) certain neurological conditions; (9) concealed or occult tuberculosis; (10) some manifestation of syphilis. This is quite a formidable list but all these possibilities and more must be kept in mind. The fact is that the more we know the more difficult it is to arrive at the correct diagnosis of early specific disease.

Now, in this particular man suppose we eliminate rapidly the possibilities. Let us admit at the outset that a careful history has been obtained and very careful and painstaking physical examin-

ation has been made. So the blood examination eliminates (2) and (4), might show lymphocytosis and suggest (6) (7) (9) and (10). It would help to eliminate (3). A normal white count with polynuclear increase might suggest (1) or (5). Physical examination eliminates (3) and (6). Basal metabolic rate test eliminates (6) and (7). Negative W. R. probably eliminates (10). X-ray examination eliminates (1) and gives positive evidence of (9). Intradermal O. T. gives positive evidence of some tuberculous focus still active. Now where do we stand? The only positive findings are connected with (9) and we have the history, the physical examination, the x-ray and the skin test. But, it might be said how about (5)? Well, here is my answer. If one can definitely prove that there is a chronic focal infection and can also eliminate every other possibility including occult tuberculosis especially, then I am ready to admit the possibility that the focal infection is responsible for the symptoms. But when I see almost every one carrying around somewhere in their bodies some potential focus, yet these people are either well or have some other definite disease, then I cannot get enthusiastic about focal infection as a cause of all the indefinite aches and pains of which people complain. It would be well if all of us talked less about focal infection and very definitely set out to find it in every case where it is suspected of producing illness. The expressions "suspicious teeth" "suspicious tonsils" should be dropped from our conversation. Let's have proof, facts, not suspicions and impressions. Then the diagnosis of my patient is occult tuberculosis, a perfectly definite entity, discoverable by him who will take the pains to look.

As has been said before the best treatment is in a sanatorium at first where health rules are learned. Cod liver oil does undoubtedly help. If sanatorium treatment cannot be arranged, then home treatment must be resorted to, or a sojourn in the woods. The patients get well if they are correctly treated.

A NEW PROBLEM

Several months ago a married woman, 49 years old, complained of headache and staggering gait. These had been coming on gradually for some months. The headaches were especially severe if she leaned forward. The pain would seize her suddenly, it was excruciating and the only relief she had was to sit with the head thrown backwards. The family history was somewhat unusual. Mother died aged 54 of heart trouble and cancer. Father died at 82 of empyema of gall bladder. One brother and one sister have pernicious anemia, the former complicated by subacute combined sclerosis of the spinal cord. Four other siblings are living and well.

The patient had frequent sore throat during childhood otherwise she was vigorous. Menstruation was normal and for years was accompanied by migraine headaches relieved by vomiting. Since she reached the age of 40 the headaches have ceased although she still menstruates. She has had three children all of whom are living. There were no miscarriages. Following the birth of the last child 13 years ago she noticed buzzing in the right ear. This ear gradually lost the sense of hearing. She however did not pay any great attention to the ear but dated her illness 8 years ago when she noticed the gradual development of a stumbling, uncertain gait. Not long after her family noted a rapid, staccato, slurring speech. Four years ago she had double vision which was partially relieved by glasses. Two years ago she had trifacial neuralgia on the left side which lasted for 5-6 months, then spontaneously ceased. She gradually lost control of fine movements of the right hand. More recently she has had severe occipital headaches which come on either when bending forward or when suddenly looking to right or left. Also recently walking has been so difficult that she has had to have support. Intelligence has not been impaired. She has never lost consciousness nor had convulsions.

Physical examination showed a well nourished woman with full intelligence, not acutely ill, no fever and a normal pulse. The head presented no peculiarities. The first cranial nerve appeared normal. The pupils were equal and reacted to light and accommodation, with consensual reflex. Both optic discs were definitely choked. There was lateral nystagmus on looking to the right and looking up. The right side of the face was slightly flattened, the mouth drawn to left more noticeable when she talked. Sensation was intact. Masseters were both strong. There was slight ptosis of the right eye lid, and loss of corneal reflex of right eye. Hearing was impaired in right ear but bone conduction was better on right than on left. Pharyngeal reflexes present. Tongue protruded in midline, no tremor. There was no general glandular enlargement. The heart, lungs, and abdomen were normal. The abdominal reflexes were present.

All deep reflexes were hyperactive with right ankle clonus. There was normal plantar reflex response. Romberg's sign was present. There was no astereognosis, but there was adiadochocinesia in the right hand. There was tendency to fall to right side and backwards. Past pointing of right finger toward left was present. Flushing ears with hot and cold water and whirling in chair were not done. The Wassermann reaction was negative. Blood pressure was normal. Urine and blood count were normal.

Aortitis, Luetic, With Multiple Aneurysms; An Unusual Case*

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A case of luetic aortitis with multiple aneurysms is reported because the particular interests of certain of the objective signs which added to the confusion rather than to the clarification of the diagnosis, and which signs were explained only at the time of necropsy.

The patient, a male negro of 55 years, entered the hospital on April the 10th, 1928, with a chief complaint of cough. Two months previous to admission the patient contracted a nasal cold and cough. He felt weak and had vague generalized joint and muscle pains, but continued up and about. Hoarseness was also present and a rather prominent symptom. One month after onset of the present illness the patient coughed up a small amount of blood and since then he has raised about a teaspoonful of dark red blood each morning and occasionally during the day. On the morning of the day of admission a pint of bright red blood was expectorated. There was no retching nor vomiting. At this time there was an associated aching sensation in the left shoulder, but no chest pain. The patient's other complaints were vertigo once in the latter part of March, failing vision, chronic otorrhea on the left, left ear deafness, emesis once two days before admission to the hospital, and a sensation of muscle cramps across the back for the past two months.

The past medical history included a Neisserian urethritis and epididymitis in youth, pneumonia at the age of 42, mumps and chicken pox in childhood. The patient's wife died four years previously of pulmonary tuberculosis. The social and family histories were otherwise unimportant.

Physical examination revealed a well nourished, well developed middle aged negro, apparently in no discomfort, a long scar on the left side of the face extending from the eyebrow to chin produced by a razor years before, poor convergence of the eyes, left pupil slightly larger than the right, tessellated fundi, injected nasal mucosa with some mucopurulent discharge, dirty teeth with many fillings and cavities, enlarged injected tonsils, injected pharynx, pulsating vessels of the neck, limited chest expansion of a predominant abdominal type, retracted supra-and infra-clavicular fossae, greater on the left, exaggerated tactile fremitus and vocal fremitus at the right lung apex with slight impairment of resonance, distant breath sounds in the second and third left interspaces with showers of fine moist rales about 5 cm. off left border of the sternum in the second interspace, heart of normal size to percussion but with a widening of the supracardiac area of dullness, heart tones of good quality, aortic second accentuated and "popping" in character, a blowing systolic murmur audible over the entire precordium and loudest in the vessels of the neck, radial arteries somewhat tortuous, left pulse decidedly fuller and sooner than the right, blood pressure R-118/78, L-132/78, liver edge palpable at costal margins, small scar on the prepuce, slight clubbing of the fingers, very hyperactive knee and Achilles reflexes.

Laboratory examinations showed a trace of albumin in the urine. Blood count showed a hemoglobin of 56% with 3,370,000 red blood cells, 10,100 white blood cells with 81% neutrophiles, 18% lymphocytes and 1% large mononuclears. Blood Wassermann was negative and blood chemistry was well within normal limits. Seven sputum examinations were negative to tubercle bacilli. Stereoscopic x-ray of the chest showed a prominence of the aortic arch with a knob-like projection about 2 to 3 cm. in diameter extending off to the left of the descending portion, slight fibrous changes in the right lung apex.

DIAGNOSIS AND COURSE

A diagnosis of luetic aortitis, aortic aneurysm, pulmonary fibrosis (right lung apex), chronic rhinitis and oral sepsis was made. The patient's course in the hospital was afebrile and the pulse rate usually ranged between 68 and 75. Daily he produced a small amount of sputum which was invariably blood tinged. At about midnight on 4-18-28, the 9th day in the hospital, the patient had, without warning, a sudden severe hemorrhage from the mouth and within a few minutes he expired.

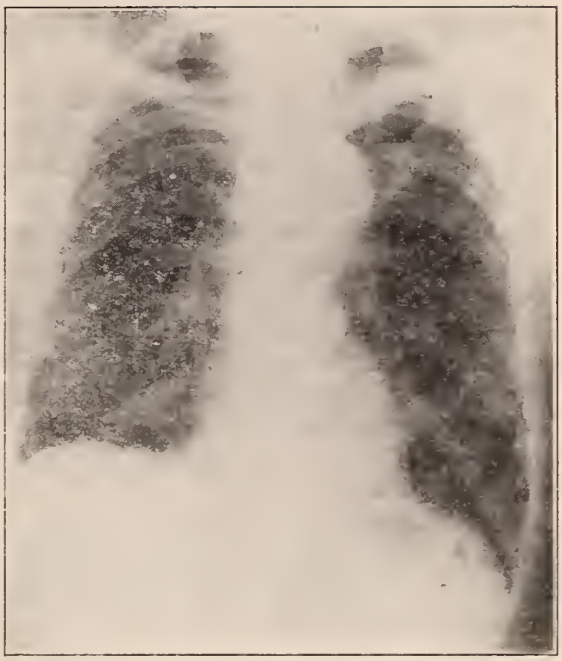
Previous to post mortem examination there was some debate as to the reason for the left pulse being more prompt and fuller than the right and the reason for the greater blood pressure on the left. Of course, an aneurysm of the innominate artery might explain this but x-ray was of no help and to the contrary the presence of a lesion of the character noted would rather suggest that the left pulse should be smaller and slower and the blood pressure lower. It was suspected that the rales in the left lung might be explained by extravasation of blood from the aneurysm, with a minute break in

*State of Wisconsin General Hospital.

the wall. The possibility of the chest findings being explained on a tuberculous basis was not admitted but could not be absolutely ruled out. The history of the present illness was rather suggestive and the patient's wife had died of tuberculosis. No history of a syphilitic lesion of any type was obtainable. The course in the hospital being afebrile, the negative sputa and, of course, the x-ray rather opposed the existence of active tuberculosis.

POST MORTEM EXAMINATION

The necropsy was performed by Dr. W. P. Corr, and the important findings, taken from the pathologist's report, are as follows: Left pupil 5 cm. right 9 cm. Some bloody fluid exuding from nostrils and mouth. Anterior pericardial space measures 8 cm. Lungs voluminous and with the pericardium fill the thoracic cavity. Right lung adherent everywhere to the lateral wall by dense fibrous adhesions between the pleura. The left pleural sac contains about 20 cc, of blood tinged fluid. Pericardial sac contains 20 cc. of clear reddish fluid. Lungs, trachea, esophagus and upper half of the aorta were removed en masse. On sectioning the aorta many longitudinal streaks and several calcified plaques are found in the thoracic portion. In the right lateral portion of the ascending aorta there is a small outpouching about 2 cm. in diameter and .8 cm. in depth. At the upper right posterior portion of the arch there is a similar outpouching which admits the tip of the little finger, and proceeds into the anterior border of the trachea just above the bifurcation where it produces a distinct bulging into the trachea. In the descending portion of the aorta on the left lateral border there is a large outpouching about 2 cm. in diameter which extends into the upper anterior border of the left upper lobe, into which it has ruptured. At the base of both of the latter two aneurysms there is a light red slightly laminated thrombus. Location of the perforation is not found on dissecting into the bronchi of the left lung. Left lung—pleura is smooth, light red in the central part and dark red in the upper portion around the area of perforation of the aneurysm and slightly darker red in the lower dependent portion. Heart weighs 400 grams. A few yellowish raised plaques in the coronaries. Two of the aortic valves are adherent and one of them is distinctly puckered. Aortic orifice measured 7 cm. The arch and base of the aorta contain several small puckered and parallel longitudinal wrinkles. The aorta below the diaphragm shows many raised



plaques, but no longitudinal wrinklings as noted above the diaphragm. A pedunculated fibrous-like mass about 3 mm. in diameter is present at the orifice of the innominate artery producing partial obstruction. A similar smaller mass is in the orifice of the left subclavian artery. The liver, spleen and kidneys show congestion.

ANATOMICAL DIAGNOSIS

1. Luetic aortitis with aortic sclerosis and multiple aneurysms of the arch of aorta with perforation into the left lung.
2. Hemorrhage into lung.
3. Pleural adhesions (right).
4. Left hydrothorax.
5. Congestion of liver, spleen and kidneys.
6. Adherent aortic valves.

COMMENTS

A total of three aneurysms in one individual is not commonly seen, and interestingly in this case, the aneurysm pressing against the trachea was almost at the point of rupture; and probably this would have occurred shortly had not the aneurysm on the descending aorta done so first. Of course, the post mortem findings explain the puzzling signs as the fibrous mass in the orifice of the innominate artery was sufficient explanation for the smaller and slower pulse on the right. Undoubtedly the rales in the left chest were due to blood extravasation through the aneurysm.

Nasal Septum Destruction; Chromium Plating

By ROBERT C. THACKERAY, M. D.
Racine

In January of 1928, the writer examined a man who complained of a persistently irritated nose. He was a plater by trade, and at that time had been doing much chromium plating.

Examination of the nose showed a large ulcerating hole in the septum; the size was about that of a quarter.

We suspected his occupation as bearing directly upon the perforated septum. A report was mailed to his insuring company under the Workmen's Compensation Act, and the case was referred to an eye, ear, nose and throat specialist for further study.

I take the liberty of presenting the report of the doctor so that we may acquaint ourselves with the progress of medical opinions in similiar cases.

"History: Claims injury to his nose first part of Jan., 1928. Has been working in chromic acid fumes and thinks these fumes have burnt his nose. Has been going to Dr. Thackeray of Racine up to now. Says his nose is not healing the way it should. He has been told that there is a hole in the septum of his nose.

"Examination: Examination in my office on 2-28-28. There is a hole in the cartilage of the septum of this man's nose about three-fourths of an inch in diameter. The margins of this ulcerated area are thickened and inflamed with more or less scabbing present. He gives me a history of having worked in chromic acid plating for about a year, but the last few months the fumes have been carried off by a system of ventilating fans.

"Conclusion: It seems quite improbable that the large opening which this man has in his septum could have occurred in the short period of a year. Openings in the septum usually are the result of long continued scabbing and ulcerations on the septum or following a septum operation—he denies ever having had any such operation, however. I believe in this case, that he undoubtedly had an opening in his septum possible without his knowledge over a period of a good many years, and that in the presence of the irritation from the chromic acid fumes was more conscious of his nasal condition, and it undoubtedly did aggravate the soreness which is always present in these cases. I have informed him of my view in this matter, and he seemed to take a reasonable stand. I have advised him what to use, and believe that the occasional application of this medicine will keep his nose in a comfortable condition."

We have seen this man several times since. He has installed a very satisfactory "blower system" over the chrome tanks. His whole time is by no means spent over these tanks. Anyway the ulceration has at present abated. But, too, there seems to be no chance that the perforation will ever close. Whatever disability he has will persist.

In October of this year, three men came to the writer from another plant. All of them were chromic acid platers. Two of them had holes in the septum about the size of a quarter. The third one had a white ulcerative patch in the septum; that would seem to indicate that he too will soon have a complete perforation.

Since observing this series of cases, the writer has read a very recent article in the October number of Safety Engineering, entitled "Health Hazards in Chromium Plating" and written by J. J. Bloomfield and William Blum. Mr. Bloomfield is assistant physical chemist in the United States Public Health Service, and Mr. Blum is a chemist in the United States Bureau of Standards. In writing about the effect of chromic acid fumes, they have rendered a very exhaustive report, and I take the liberty of quoting excerpts. They say:

"A very common site for this ulcerated process is on the septum of the nose. The cartilaginous framework of the nose consists of five pieces—the two upper and the two lower lateral cartilages and the cartilage of the septum. The limitation of the perforation to the cartilage of the septum is accounted for by the fact that the mucous membrane covering it is adherent, forming the perichondrium, and is far less vascular than the mucous membrane lining the rest of the nasal fossae. Once the mucous membrane is destroyed the blood supply to the cartilage is cut off, and necrosis ensues. The ulceration, having progressed upward as far as the junction of the septum with the ethmoid and backward to the vomer, becomes arrested. Healing then takes place, the bone never being attacked, and the cicatrix usually becomes covered with an ecthymatous crust of mucus. In no instance is the anterior of the lower border of the septum destroyed. Consequently, the rigidity of the parts is maintained, and deformity, so prominent in other ulcerated processes attacking the nose, is absent. The onset of the morbid process is ushered in by sneezing and the ordinary symptoms of nasal catarrh. The pain accompanying the ulceration appears to be insignificant; at any rate it is never severe enough to necessitate absence from work or to call for medical treatment. The only apparent inconvenience which results is the formation of plugs of mucus in the nasal passages. Other sites where ulcers may appear are the roots of the finger nails, the knuckles, and the eyelids. Ulcers may form also on the edge of the nostrils, on the toes, if the shoes become soaked with chromic acid or chromates, and, rarely, in the throat. The ulceration is slow, gradual, and not very painful."

In 1902, in England, Legge found perforation of the septum in 71.6 per cent of 176 workmen, and ulceration without perforation in 11.3 per

cent. Some men seem to be immune, while others develop ulcers after 7 weeks (1 case) or 2 to 3 months (2 cases).

Preventive measures which have been suggested in the chromate industry are the use of inclosed machines for the grinding of raw materials, and efficient local exhaust ventilation. Where dust or spray is evolved in the process, efficient ventilating systems are very necessary. Respirators, impermeable gloves, anointing the face, hands, and nose with vaseline, proper working suits and caps, frequent baths, and changes of clothing upon cessation work are recommended. Most important is frequent medical inspection with prompt treatment of the slightest skin affections as soon as they occur. Without such medical inspection it does not seem possible to prevent the occurrence of chrome ulcers and their development.

Besides providing sufficient exhaust ventilation for the removal of acid mist, of the type and degree mentioned in an earlier portion of this paper, it is essential that hygienic measures should be practiced. Periodic medical examinations of the workers and treatment, by the plant physician, of lesions contracted in the work are very important. Several methods of treatment are given by Kober and Hayhurst in their book on industrial health, the chief of which consists of washing the affected parts with a 5 per cent solution of sodium bisulphite, or cleaning the injured part with hydrogen peroxide solution and treating with an ointment containing ichthyol applied under an absolutely waterproof plaster. In a recent address in Toronto to the American Electroplaters' Society, Dr. J. G. Cunningham, director of the department of industrial sanitation of the province of Ontario, made similar recommendations and suggested the use of a dilute solution of sodium thiosulphate as a wash. Davidson, in a recent paper on the treatment of chemical burns, recommends the application of a few drops of ammonium polysulphide solution on the chromic acid cores, in an effort to convert the chromic acid into the less active tissue irritant, chromium hydroxide.

CONCLUSIONS AND RECOMMENDATIONS

Even though this survey was not extensive, the results obtained in different plants were so consistent, and agreed so well with previously recorded experiences upon the effects of chromic acid and chromates, that the following conclusions and recommendations appear warranted:

1. Natural ventilation is seldom, if ever, adequate to remove the chromic acid spray produces during chromium plating.
2. Vertical ventilation, such as is commonly used in chemical hoods, is ineffective because it draws the chromic acid spray past the face of the operator who is working over the tanks.
3. It is feasible by a properly designed system of transverse ventilation, with an adequate air velocity, to reduce the content of chromic acid to less than 1 milligram in 10 cubic meters of air.
4. Continuous daily exposure to concentrations of chromic acid greater than 1 milligram in 10 cubic meters is likely to cause definite injury to the nasal tissues of the operators.
5. The most efficient method of ventilation is to draw the air laterally across the top of the plating tanks into ducts from 1 to 2 inches wide and extending fully along one or more sides of the tank.
6. To be effective, the duct should not be required to draw the air a lateral distance of more than 18 inches. For wider tanks there should be ducts on both sides, or else two ducts in the center.
7. The level of the plating solution should be at least 8 inches below the top of the tank and the duct should be at the top of the tank.
8. For effective ventilation it is necessary to have an air velocity at the duct of about 2,000 feet per minute.
9. Care should be taken to avoid obstacles to the air current, such as large projecting anodes or racks.
10. A hood surrounding one or more sides of the tank may be advantageous in protecting against disturbance by other air currents such as those from open windows or from other fans.
11. The air velocity in the duct can be measured by means of a kata thermometer.
12. A vane anemometer is usually too large to measure the air velocity in the duct. It may, however, be used to measure the air velocity at the outlet of the exhaust flue, from which measurement the volume of air and hence its velocity in the duct may be computed.
13. The air may be sampled as rapidly as 35 liters per minute by means of an exhaust and an impinger bottle containing normal sodium hydroxide solution.
14. The amount of chromic acid absorbed from the air can be determined by titration with iodide and thiosulphate, or, if present, in minute

amounts, by a colorimetric test with hematoxylin.

15. The operators should guard against injury to the nasal tissues by applying to them, several times daily, vaseline or mentholatum salve.
16. Rubber boots, gloves, and aprons should be used when feasible, to prevent contact of chromic acid with any abraded skin.
17. If gloves are not used, the hands should be washed frequently with water, and all cuts or abrasions greased with a mixture of three parts vaseline and one part lanolin.
18. All floors near the plating tanks should be frequently washed down.
19. Operators should have periodic medical examinations, with prompt treatment of the slightest skin or nose affections.
20. Such treatment should include washing with bisulphite, ammonium polysulphide, or thiosulphate solution, application of an ointment, and a waterproof covering.

This investigation included a study in six chromium plating plants of the kind and degree of ventilation and its efficiency as judged from the content of chromic acid in the air above the plating tanks. Twenty-three workers whose occupational history was known were examined for evidences of injury due to chromic acid. The results showed that, of 14 persons actually engaged in chromium plating, 2 had perforated nasal septa, and all but 2 showed some inflammation of the nasal tissue. No evidence was found of digestive disorders or of damage to the lungs or respiratory tract.

The results show that there is a real, though not critical, hazard in chromium plating. The hazard can be reduced and practically eliminated by proper ventilation and sanitary measures.

There is one aspect of this chrome plating business that every one reading this is invited to explain. It is this: without exception, and in a series of some ten cases, every person doing chrome work, perforation or no perforation, has gained from five to ten pounds.

When we consider the extensive destruction of chromic acid fumes in the nose, it would be reasonable to presume that not all of the fumes inhaled are deposited upon the septum. If some of it is inhaled into the rest of the respiratory tract, we are justified in wondering if there is further destruction that has not been discovered. If there is, it is difficult to explain the gain in weight, also if the gain in weight represents a real gain in bodily vigor.

We repeat again that the destructive process is not painful. The most annoying symptom is that of sneezing, especially when coming out into fresh air.

The constant symptom is like that of a persistent and incurable "cold in the head."

TUBERCULOSIS and OTHER CHEST CONDITIONS

Tuberculosis; Modes of Onset

By A. A. PLEYTE, M. D.
Milwaukee

It seems to me that doctors more often fail to make a diagnosis of early tuberculosis because they do not recognize the modes of onset of this disease than for any other reason. Frequently the patient who presents suspicious symptoms of tuberculosis reveals no physical signs. In such instances the doctor is very likely to consider that other diseases are causing the symptoms. A beginning gastric or duodenal ulcer, hyperthyroidism, heart disease or a partial nervous breakdown are most often thought of and frequently diagnosed, when in reality the patient is suffering from tuberculosis. In order that we will not be misled so often it seems to me that we should always keep in mind the modes of onset of this disease. Perhaps no other malady known to man produces such variation in its onset. The different modes of onset usually described are:

1. Digestive
2. Insidious
3. Pleuritic
4. Glandular
5. Hemoptysic
6. Meningeal
7. Laryngeal
8. Enteral
9. Febrile
10. Pneumonic
11. Bone and Joint
12. Typho-miliary

Perhaps the most frequent mode of onset of tuberculosis is the one manifested by digestive symptoms. Anorexia, slight indigestion, finickiness in diet, flatulence, possibly an indefinite pain or heavy feeling in the abdomen one-half to one hour after a meal, slight nausea, or tenderness in the abdomen may be present. These symptoms, of course, are suggestive of various diseases such as chronic appendicitis, cholecystitis, colitis, duodenal ulcer, gastric ulcer, Bright's disease and cardiac disease. But, on the other hand, one or more of these symptoms frequently usher in tuberculosis.

The second most frequent mode of onset is known as insidious. The patient may have a low grade fever and possibly slight loss of weight, occasional "colds," unusual fatigue after a day's work which may persist even after a good night's rest, lack of ambition, and possibly other indeterminate manifestations. In other words, he does not feel up to par. So again with this mode of onset we have a most indefinite beginning which could be caused by a great variety of diseases.

The pleuritic onset, either with or without effusion, is next most common. In fact, in pulmonary tuberculosis we believe that the pleura is usually involved also. Pleurisies with effusion are usually tuberculous. On the other hand, the recurrent type of dry pleurisy may frequently be considered as neuralgia, neuritis or possibly a referred pain from diseases such as colitis, ovaritis, nephritis or cholecystitis. Personally, I believe we should always consider the possibility of tuberculosis when a patient thinks he has pleurisy.

The fourth most common mode of onset is glandular in type. The cervical or tracheobronchial glands may be enlarged and produce symptoms of intoxication. Enlarged glands of the neck, of course, may be due to Hodgkin's disease, lymphadenitis, leukemia or may be caused by microorganisms which have gained entrance via the lymphatics to the cervical glands. Decayed teeth, diseased tonsils or nasal sinus infections may be concomitant or etiological. Markedly enlarged tracheobronchial glands are usually tuberculous. If the family history and tuberculin tests are positive and we have adentitis involving the tracheobronchial, cervical or axillary glands, we should consider these glands tuberculous. Careful search may also reveal other foci of tuberculous disease.

The hemoptysic mode of onset, while not so frequent, is more spectacular. All patients who cough up a teaspoonful or more of blood should be considered tuberculous unless and until other definite cause is found.

The meningeal onset of tuberculosis usually occurs in children and is manifested by fretfulness, disinclination to play, disturbed sleep, digestive symptoms, temperature, rapid heart, headache, and later by more marked symptoms such as delirium and unconsciousness. We may be confused for a while with the other types of meningitis.

The other forms of onset occur less frequently. We must remember, however, that tuberculosis does begin in one of these ways. Naturally, when tuberculosis, which is nearly always a chronic disease, has so many different modes of onset, we must be most careful to obtain a definite, detailed, personal history. We must remember, too, that we have for many generations been building up a resistance to tuberculosis. This has resulted in a fairly marked degree of immunity in many instances. Occult, hidden or latent tuberculosis is found much more frequently today than it was ten or fifteen years ago. So if we can recognize the rather indefinite modes of onset and slight exacerbations of tuberculosis we will be much more successful in the treatment and prevention of this disease.

Nitrohydrochloric Acid in the Treatment of Hay Fever

Dr. Harry Beckman, 638 Fourth St., Milwaukee, whose paper on the use of nitrohydrochloric acid in the treatment of hay fever appeared in our June issue, writes to us that he believes the remedy was given a considerable trial throughout the state this past summer, since a number of physicians have of their own accord reported to him their results with the acid. He is therefore stimulated to pursue his study of the subject, and would be very grateful to any physician who would report his case or cases to him under the following heads: (a) No. of cases. (b) No. of cases obtaining complete relief. (c) No. of cases obtaining marked relief. (d) No. of cases obtaining no relief (to include those only slightly relieved). (e) Remarks.

We believe that the few minutes required to supply Dr. Beckman with the information he requires would be well spent, for it is only by such cooperative effort that a new and promising remedy can have its true worth accurately determined.

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EDITORIALS

WHAT YOU OWE

"I HOLD every man a debtor to his profession," said Bacon.

A profession is not something you join casually as you would a club, or a business organization. It isn't for joiners at all. There is no question of deciding periodically whether to renew or resign. Once in, you are in for life, generally speaking. You accept the tenets of the profession and in doing so, you enter into partnership with all the other members. Above every selfish gain is the obligation to serve the profession, its doctrines, and its members as they serve you—THE SURVEY.

It may be a bit bromidic to add that there is a great and selfish joy in serving one's profession. Serving for the glory of the profession, not for one's own glorification and for a narrow and immediate profit.

Live we must. And living reasonably well and befitting the status of a professional gentleman is an obligation to that profession. But this is a far cry from the practice of one's profession as a trade or business, or of estimating honor by the distance one gets on financially. And inasmuch as the business interests of our vocation are advanced beyond their reasonable consideration so do the professional interests recede.—*H. E. D.*

PERIODIC HEALTH EXAMINATIONS

RECENTLY there appeared in a Wisconsin daily newspaper an announcement that the paper had arranged for the publication of a series of syndicate articles on "How to Keep Well." The announcement was prefaced by the remark that the city in which this newspaper was published had many good physicians and surgeons, probably as good, on the average, as any city in the country. It stated, however, that these physicians and surgeons were interested only in the problem of *curing the sick*, not in that of *keeping people from getting sick*, and that the series of articles which would soon begin to appear in the newspaper would perform the important function of telling people how to keep well.

The American Medical Association has for several years attempted to carry on among its members a movement for fostering and popularizing health examinations by the family physicians of the country. Attempts have been made by several state societies and officers of state societies to have this work carried on by their members. It must be admitted that this movement has not met with much support on the part of the medical profession at large and, judging from such announcements as that referred to in the lay press, the movement has not made any profound impression upon the general public.

The attitude of inertia toward this movement manifested by the medical profession is difficult of adequate explanation. With a decreasing demand for his services in the treatment of acute infections which formerly gave the family physician his largest source of income, it would be natural to suppose that he would welcome any movement which would provide a substitute for the services he was formerly obliged to give to the treatment

of acute infectious diseases. Can it be possible that the physicians prefer to wait until some large and well organized movement on the part of the laity takes up this problem and carries it to a solution? If so, he will probably not have long to wait. There are already evidences of such movements getting under way and, when it comes, the physicians will probably have little to say about its direction, but will be swept along by the tide of public opinion and action. *J. F. S.*

NO SNAP

THE physician whose time is mainly devoted to the treatment of acute disease needs to reconstruct his thinking when he is dealing with any case of curable tuberculosis, or of suspected tuberculosis. Here is no medical or surgical disease of a self limited nature. Its victims do not proceed promptly either to die or to get well. For dealing successfully with tuberculosis, *brilliancy* on the part of diagnostician or therapist does not rate so high as *patience* or *persistency*. Not the sprinter but the middle and long distance runner is needed to cope with the situation. Tuberculosis is not a flashy performer but is unexcelled in the gamut of diseases for its staying powers.

The physician who cannot match ability of the disease to "last for the long pull," and who cannot command the cooperation of the family "for the long haul," should resign the handling of the case to a confrere. This should be done just as readily as a goiter operation or a tumor of the brain is referred to an accomplished operating surgeon. When this idea comes to prevail a little more generally in the minds of the medical profession then, and probably not until then, will the medical profession make the full contribution it is theoretically capable of making toward the complete control and ultimate eradication of this disease.

H. E. D.

THE NATIONAL RESEARCH BUREAU QUESTIONNAIRE

DERMATOLOGISTS have recently received a letter and an accompanying questionnaire from Cincinnati. The letter is signed "National Research Bureau, By M. M. Downing." It opens with the statement that the "Bureau" has been told by a "well known authority that more than 90 per cent of all people suffer from the most common forms" of skin disorders, "such as acne, blackheads, freckles, muddiness, etc.," and that only 10 per cent of all men and women have a skin that is clear and free from blemishes. In order to have further light on this abstruse question, the National Research Bureau wants the dermatologist to whom it writes to answer four questions. The questions read:

"1. Is it true that 90 per cent of all people have some form of skin disorder or discoloration?

"2. In your opinion do skin blotches affect the success of individuals?

"3. Is there a growing tendency for people to consult a skin specialist for the correction of skin troubles?

"4. Should people with skin trouble have it corrected immediately or let it take its course?"

Many of the physicians who have received this questionnaire have written to The Journal asking for information about the National Research Bureau. Investigation shows that the National Research Bureau is merely an imposing name used by an advertising agency, the Procter and Collier Company. M. M. Downing appears in the Cincinnati director as a stenographer. We are justified in assuming, therefore, that the questionnaire that physicians are asked to fill out is nothing but an attempt on the part of an advertising agency to get expert opinions at the cost of a two-cent stamp, and that these opinions will be used to bolster up an advertising campaign of somebody's soap or ointment. Obviously, there is not the slightest justification, either economic or moral, for sending out a questionnaire to the medical profession on the stationery of an imposingly named organization that exists only on paper. If advertising concerns wish to get expert testimony from the medical profession, the least they can do is to make it plain to physicians that such information is desired for advertising purposes. Of course, so long as physicians continue to answer questionnaires from sources of which they know nothing, so long, doubtless, advertising concerns and others will take advantage of their easy-going tolerance. When physicians make a routine practice of consigning to the waste-basket or the ash-can every questionnaire that asks for free advice and comes from an unknown source, the questionnaire nuisance will be a thing of the past.

—Journal A. M. A., Dec. 8, 1928.

THE PRESIDENT'S PAGE

K. W. Dacey

STATE MEDICINE

THE question, how and to what extent medical, educational and charitable activities in the state eminating from the authorities in Madison, are affecting physicians engaged in private practice is being heard discussed more frequently all the time. There is, as there should be, a great deal of laudatory comment when the post-graduate medical extension work of the University of Wisconsin is under consideration. The courses last year in pediatrics and the faculty lectures have been exceptionally successful in spreading knowledge in their respective subjects and these lectures were well attended. Regarding some of the other phases of State endeavors, opinions differ and often are diagramatically opposed. While the majority of physicians, perhaps, are in full accord with what the State of Wisconsin and private societies are doing in enlightening the public by sending out lecturers and advisors, by holding free chest clinics and pediatric clinics, advising prospective mothers, etc., there is not a small minority who regard a part of these efforts as distinctly detrimental to their economic interests as physicians in practice. The unjustly speak of these activities as the forerunner of an essential socialization of the medical practice, as State Medicine. They point to the great volume of work that is now being done at the Wisconsin General Hospital for both charity and pay patients and some physicians are dissatisfied with the admittance into the State Hospital of applicants that are perfectly able to pay their way in non-state institutions. They would have us understand that the University and its Medical School, instead of being a help to the profession, bids fair to develop into a quasi competitor to the general practitioners of the state.

It is evident, as one listens to the multiplicity of opinions, that hearsay and misinformation and a lack of knowledge of the true facts are mostly responsible for this adverse criticism; however, it is well that these matters should be talked of and the Wisconsin Medical Society at various times has appointed committees to study the conditions complained of.

To those who are interested and who are honestly anxious to arrive at an understanding and to form an unbiased opinion I would suggest obtaining a copy of the final report of the committee, "To Survey and Study the Problem of Hospital Charity in Michigan Hospitals," appointed by the Michigan State Medical Society. Conditions in Michigan are very similar to those in Wisconsin. The Michigan committee has done valuable work and is to be complimented. A knowledge of the committee's analysis of conditions in its state will illuminate our own and would lessen adverse criticism in our state materially. It will make for a deeper insight and would make an impartial solution of our own problems much easier. Please get one of those reports and study it, so that when this subject again is brought up for discussion, we all may be well acquainted with the facts.

DESERVES SUPPORT

TWO years ago the State Board of Medical Examiners proposed to the legislature that the Board be granted an appropriation of $5,000 a year to permit of the employment of a lay investigator to uncover the cancer quack and like gross frauds in the field of treating the sick. That bill passed both houses of the legislature by large majorities only to meet with veto from Governor Zimmerman on the ground that local enforcement officers should do this work.

This measure will be re-introduced in the session just opened. The need is self-evident to physicians and I call your attention in this column to the bill only to the end that each may present its merits to his assemblyman and senator. The bill deserves to become a law at this session.

THE STATE MEDICAL SOCIETY OF WISCONSIN

ORGANIZED 1841

Officers, 1929

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5th Dist., J. L. Shaw.....Manitowoc
6th Dist., F. G. Connell.....Oshkosh

TERM EXPIRES 1929
7th Dist., Edward Evans.....La Crosse
8th Dist., T. J. Redelings.....Marinette

TERM EXPIRES 1929
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10th Dist., H. M. Stang.....Eau Claire

TERM EXPIRES 1930
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LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES

County	President	Secretary
Ashland-Bayfield-Iron	R. O. Grigsby, Ashland	M. L. Young, Ashland.
Barron-Polk-Washburn-Sawyer-Burnett	S. O. Lund, Cumberland	S. R. Medley, Shell Lake.
Brown-Kewaunee	P. R. Minahan, Green Bay	M. H. Fuller, Green Bay.
Calumet	J. A. Schmidt, Brillion	C. F. Lawler, Hilbert.
Chippewa	C. B. Hatleberg, Chippewa Falls	W. C. Henske, Chippewa Falls.
Clark	M. McGonigal, Loyal	E. L. Bradbury, Neillsville.
Columbia	C. W. Henney, Portage	H. E. Gillette, Pardeeville.
Crawford	O. E. Satter, Prairie du Chien	C. A. Armstrong, Prairie du Chien.
Dane	H. P. Greeley, Madison	Hans. H. Reese, Madison.
Dodge	L. M. Bachhuber, Mayville	A. A. Hoyer, Beaver Dam.
Door	John Hirschbocck, Forestville	T. C. Proctor, Sturgeon Bay.
Douglas	J. M. Meyers, Superior	J. W. McGill, Superior.
Eau Claire and Associated Counties	F. S. Cook, Eau Claire	E. E. Tupper, Eau Claire.
Fond du Lac	R. L. Prees, North Fond du Lac	H. R. Sharpe, Fond du Lac.
Grant	C. H. Andrew, Platteville	M. B. Glasier, Bloomington.
Green	Edward Blumer, Monticello	J. F. Mauermann, Monroe.
Green Lake-Waushara-Adams	A. J. Wiesender, Berlin	J. M. Johnson, Ripon.
Iowa	A. D. Brown, Mineral Point	M. W. Trentzsch, Highland.
Jefferson	W. S. Waite, Watertown	E. W. Bowen, Watertown.
Juneau	C. A. Vogel, Elroy	A. T. Gregory, Mauston.
Kenosha	H. A. Binnie, Kenosha	Margaret Pirsch, Kenosha.
La Crosse	R. H. Gray, La Crosse	N. P. Anderson, La Crosse.
Lafayette	W. W. Peck, Darlington	S. A. J. Ennis, Shullsburg.
Langlade	M. J. Donohue, Antigo	J. C. Wright, Antigo.
Lincoln	E. K. Morris, Merrill	W. H. Bayer, Merrill.
Manitowoc	W. G. Kemper, Manitowoc	A. P. Zlatnik, Two Rivers.
Marathon	R. F. Fisher, Wausau	Verne E. Eastman, Wausau.
Marinette-Florence	T. J. Redelings, Marinette	M. D. Bird, Marinette.
Milwaukee	A. W. Gray, Milwaukee	E. L. Tharinger, Milwaukee.
Monroe	H. B. Johnson, Tomah	H. H. Williams, Sparta.
Oconto	C. W. Stoelting, Oconto	C. J. Ouellette, Oconto.
Oneida-Forest-Vilas	C. D. Packard, Rhinelander	I. E. Schiek, Rhinelander.
Outagamie	E. L. Bolton, Appleton	C. D. Neidhold, Appleton.
Pierce-St. Croix	A. E. Gendron, River Falls	J. W. Prentice, Amery.
Portage	C. H. Lawrence, Stevens Point	F. R. Krembs, Stevens Point.
Price-Taylor	F. W. Mitchell, Ogema	G. E. MacKinnon, Prentice.
Racine	W. C. Hanson, Racine	Susan Jones, Racine.
Richland	W. C. Edwards, Richland Center	G. Benson, Richland Center.
Rock	H. McM. Helm, Beloit	H. E. Kasten, Beloit.
Rusk	L. M. Lundmark, Ladysmith	H. C. Johnson, Bruce.
Sauk	E. McGrath, Baraboo	Roger Cahoon, Baraboo.
Shawano	R. C. Cantwell, Shawano	C. E. Stubenvoll, Shawano.
Sheboygan	C. A. Squire, Sheboygan	C. J. Weber, Sheboygan.
Trempealeau-Jackson-Buffalo	C. O. Rogne, Ettrick	R. L. MacCornack, Whitehall.
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Waukesha	H. T. Barnes, Delafield	J. F. Wilkinson, Oconomowoc.
Waupaca	T. E. Loope, Iola	A. M. Christofferson, Waupaca.
Winnebago	W. P. Wheeler, Oshkosh	W. N. Linn, Oshkosh.
Wood	D. Waters, Wisconsin Rapids	W. G. Sexton, Marshfield.

SOCIETY PROCEEDINGS

BROWN-KEWAUNEE

The members of the Brown-Kewaunee County Medical Society held their November meeting on the 16th at the Northland Hotel, Green Bay. Dinner was served to forty members, after which Prof. O. V. R. Smith, of Chicago, talked on "Glandular Therapy." He covered the field very well and brought out many interesting points. Mr. Smith of the Parke, Davis and Company showed about a thousand feet of film showing how toxins and antitoxins are made.

The application of Drs. C. S. Williamson, R. L. Troup and E. M. Jordan were read and referred to the board of censors for approval.

The members of the society extended to Mrs. J. J. Bellin and Dr. R. E. Minahan their deepest sympathy in their bereavements. *M. H. F.*

DOUGLAS

Dr. E. A. Myers, Superior, was elected president of the Douglas County Medical society at the annual dinner and meeting held Wednesday evening, December 5th, at the Hotel Androy. Other officers elected were Dr. E. E. Carpenter, vice president; Dr. J. W. McGill, secretary and treasurer; Dr. L. W. Beebe, censor, and Dr. T. J. O'Leary, delegate to the state meeting to be held at Madison next September.

A paper entitled "Surgical Treatment of Tuberculosis" was read by Dr. L. E. Daugherty of St. Paul. Dr. J. M. Dodd, Ashland, councilor of the eleventh district, also spoke at the meeting. About thirty physicians were in attendance. *J. W. McG.*

FOND DU LAC

The Fond du Lac County Medical Society met at Hotel Retlaw, Fond du Lac, on November 14th, to hear J. G. Crownhart, secretary of the State Medical Society, on "Services of the Society to the Individual Member."

Dr. R. L. Prees, North Fond du Lac, was elected president of the organization at the business meeting which preceded the program. Dr. L. A. Hoffmann, Campbellsport, was chosen vice president; Dr. H. R. Sharpe, Fond du Lac, secretary-treasurer, and Dr. A. J. Pullen, Fond du Lac, censor. *H. R. S.*

KENOSHA

The Racine County Medical Society was entertained at a six o'clock dinner at the Elks' club, on November 22nd, by the Kenosha County Medical Society. An excellent program followed the dinner. The speakers were Dr. K. W. Doege, Marshfield, president of the State Society, subject, "Problems of the Medical Society"; Mr. Arthur B. Doe, of the Quarles, Spence & Quarles law firm, Milwaukee, subject, "Medico-Legal Problems," and Dr. G. B. Eusterman, Mayo Clinic, Rochester, subject, "Unusual Lesions of the Stomach and Duodenum with Differential Diagnosis." *M. V. P.*

LA CROSSE

The La Crosse County Medical Society met on November 20th at the Pioneer Hall, La Crosse. Dr. Edward Evans and Dr. N. P. Anderson gave a report on the proceedings of the Secretaries' Conference held at the A. M. A. building, Chicago, on Thursday, November 15th. Miss Margaret Lison, head of the department for crippled children of Wisconsin, talked on "The Problem of the Care and Education of Crippled Children in the State of Wisconsin."

A motion was made by Dr. Edward Evans, seconded by Dr. W. J. Jones, that the president appoint a committee of three to visit the class for crippled children and report to the county society at the next meeting. Motion carried. Dr. Gunnar Gundersen, Dr. W. J. Jones and Dr. E. Smedal were appointed as members of this committee.

The application of Dr. Robert Krohn, of La Crosse, was unanimously accepted.

At the October meeting of the La Crosse County Society, Dr. R. H. Gray, president, was host to the members at a dinner served at the La Crosse hospital. *N. P. A.*

MARATHON

The monthly meeting of the Marathon County Medical Society was held on December 5th at the Wausau Memorial hospital. Following the business session, lectures were given by Dr. W. D. Stovall, of Madison, who talked on "Skin Reactions of Hypersensitiveness and Sensitiveness to Specific Toxins," and Dr. H. M. Stang, Eau Claire, who spoke on "The Value of Cystoscopy to the General Practitioner." *V. E. E.*

MARINETTE-FLORENCE

The Marinette-Florence County Medical society held its annual meeting on November 22nd at Hotel Marinette, Marinette, and reported an instructive, interesting and prosperous year. Meetings were held monthly with excellent papers and good attendance. The following men were elected for the ensuing year: Dr. T. J. Redelings, president; Dr. H. F. Schroeder, vice president; Dr. M. D. Bird, secretary; Drs. M. D. Bird, J. W. Boren and J. V. May, censors; Dr. G. R. Duer, delegate, and Dr. J. V. May, alternate.

Dr. M. D. Bird gave a report of the Secretaries' Conference in Chicago as did also Dr. T. J. Redelings, councilor. Dr. J. W. Boren and Dr. W. S. Jones gave reports of the Interstate Medical meeting recently held in Atlanta. The dinner and floral decorations were splendid.

The society met again on Thursday evening, December 13th. Dr. Loren Guy, of Powers, Michigan, presented a paper on "B. abortus," and Dr. John Towey, superintendent of the Pinecrest Sanitorium, Powers, Michigan, spoke on "Disease of the Diaphragm." Dr. T. J. Redelings had an exhaustive discussion on "Heredity," illustrated with lantern slides.

The president appointed a legislative committee consisting of Drs. J. W. Boren, A. T. Nadeau and G. R. Duer. The dinner was splendid and the table decorations took on a holiday character which were very fitting for the occasion. *M. D. B.*

MILWAUKEE

The annual dinner meeting of the Milwaukee County Medical society was held on Friday, December 14th, at the Hotel Pfister. Dean Gordon Laing, of the University of Chicago, was the guest speaker of the evening and chose as his subject "Doctors and Patients." *E. L. T.*

OUTAGAMIE

Dr. Bernard Portis, Chicago, addressed the members of the Outagamie County Medical Society at a meeting held at the Northern Hotel, Appleton, on Tuesday, November 20th. He spoke on "Critical Analysis of Acute Surgical Abdomen." About forty physicians attended the meeting. *C. D. N.*

PIERCE-ST. CROIX

At a meeting of the Pierce-St. Croix County Medical Society held at River Falls on October 24th, the following officers were elected for 1929: President, Dr. A. E. Gendron, River Falls; vice president, Dr. J. W. Livingstone, Hudson; secretary-treasurer, Dr. J. W. Prentice, Amery; censor, Dr. C. E. McJilton, River Falls; delegate, Dr. J. W. Prentice, Amery, and alternate, Dr. Rolla Cairns, River Falls. *J. W. P.*

RICHLAND

The regular monthly meeting of the Richland County Medical Society was held December 4th and the following officers elected for the coming year: President, Dr. W. C. Edward, Richland Center; vice president, Dr. L. L. Hines, Rochbridge; secretary and treasurer, Dr. G. Benson, Richland Center; delegate and alternate, Dr. H. C. McCarthy and Dr. J. S. Booher, Richland Center, respectively. *W. C. E.*

ROCK

The Rock County Medical Society entertained approximately one hundred and fifty physicians and their wives at the annual party of the organization which was held at the Rock county farm near Janesville, Tuesday afternoon and evening, November 27th. During the afternoon Dr. W. F. Lorenz, Wisconsin Psychiatric Institute, Madison, gave several demonstrations in the administration of gas to persons affected with mental or nervous diseases.

A seven o'clock dinner was served which was followed by talks by Dr. George Clark of Janesville and Dr. Lorenz. Dancing was enjoyed following the dinner speakers. *H. E. K.*

WALWORTH

The members of the Walworth County Medical Society met at Elkhorn House on November 13th. A supper was served at the hotel to which wives of the members were invited. Dr. E. L. Sevringhaus, Wisconsin General Hospital, was the speaker of the evening. *S. G. M.*

WINNEBAGO

Winnebago County Medical Society and guests of Drs. Lockhart and Bitter, numbering about forty, met at Sunny View sanatorium, Oshkosh, on November 20th. A three course dinner was served, a creation of Mrs. Lucia, the superintendent of the sanatorium. Following the dinner a rising vote of thanks was given the hosts and Mrs. Lucia.

The meeting was called to order in the reception room of the nurses' home. Dr. L. M. Warfield spoke at length on "Diagnosis of Occult Tuberculosis." This was followed by Drs. Harrington, Forkin, Lockhart, Bickel, Drake and others.

The president referred to the resolution of last April regarding cooperation with the Wisconsin Anti-Tuberculosis Association. Drs. Bitter and Harrington spoke on the subject, and Dr. Harrington assured the society that they would be very glad to cooperate in any way possible with the Winnebago County Society.

The secretary announced that at the next meeting would be election of officers, and the president appointed as a nomination committee Drs. Andrews, Pfefferkorn, and Williamson.

A rising vote of thanks was given to Dr. Warfield for his interesting lecture, following which the meeting adjourned. *W. N. L.*

GREEN BAY ACADEMY OF MEDICINE

A meeting of the Green Bay Academy of Medicine was held on November 14th at the Bellin Memorial Hospital, Green Bay. Dr. Wenzel Wochos, of Kewaunee, read a paper on "Abnormal Obstetrics." The discussion was lead by Dr. F. Wochos and Dr. D. B. Dishmaker, Kewaunee. *E. S. K.*

MILWAUKEE ACADEMY OF MEDICINE

Dr. H. R. Foerster and Dr. F. B. McMahon addressed the Milwaukee Academy of Medicine at its meeting on November 27th. "Endothermy and Radiotherapy in the Treatment of Cutaneous Malignancies" was the subject of the paper by Dr. Foerster. Dr. McMahon spoke on "Recent Progress in the Treatment of Cancer of the Mouth."

The Academy met again on December 11th when Dr. Carl H. Davis discussed "Leukorrhoea" and Dr. Albert H. Lahmann talked on "Management of Breech Labor." *D. E. W. W.*

MILWAUKEE OTO-OPHTHALMIC

The December meeting of the Milwaukee Oto-Ophthalmic Society was held Tuesday evening, December 18th, at six-thirty at the Wisconsin Club. The members were addressed by Dr. William L. Benedict, Rochester, Minn., who spoke on "Acute Iritis; Etiology, Diagnosis and Treatment." *E. R. R.*

INTERURBAN ACADEMY OF MEDICINE

Fifty-six members of the Interurban Academy of Medicine were present at their meeting and banquet held Wednesday evening, November 21st, at the Androy Hotel, Superior. Dr. E. L. Miloslavich, Milwaukee, was the principal speaker, talking on "Medical Findings in Crim-

inology." His talk dealt with the various methods used in scientific investigation of crime.

Officers were elected for the ensuing year. They are as follows: Dr. E. Z. Shapiro, Duluth, president; Dr. H. A. Sincock, Superior, vice president; Dr. N. H. Gillespie, Duluth, secretary and treasurer; Dr. George Saunders, Superior, censor. The society will hold its next meeting at Hotel Duluth on January 16th.

NEWS ITEMS AND PERSONALS

Pointing to 1,021 lives as Wisconsin's sacrifice in automobile accidents in 1926 and 1927, the state board of health in a biennial report on the subject invited a more general cooperation of drivers and pedestrians to cut down this excessive mortality. Ignorance and carelessness are twin faults in causing this huge loss, the report charges. It urges fuller education in safety principles and efficient enforcement as the factors to bring about improvement.

"It is a further cause for regret," the statement added, "that the first ten months of 1928 indicate, instead of a decline, an increase over the highest record for automobile deaths of any previous year."

"When we appreciate more fully," the board stated, "that a death resulting from an automobile accident is just as much a loss to the community, state and nation as though the individual had died from one of the easily preventable diseases, there will be renewed interest on all sides to check this unnecessary loss in human life. It is no exaggeration to state that the automobile must be reckoned with as a great destroyer of human life."

The report shows that during the two years cited, 201 Wisconsin children under 15 died from automobile accidents.

"These deaths are due in a large measure," says the board, "to accidents when playing on the street, running off the sidewalk or at street crossings and walking on the public highway. There is a great need for stringent regulations to prohibit children from playing on the street if anything worth while is to be accomplished in a preventive way. Children must also be educated by the parents and at school how to cross the street with safety and how to walk off the highway to reduce the danger of being struck by autos. When these things have been done, all drivers should be held strictly accountable for any carelessness, reckless driving or wanton disregard of life and limb."

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Dr. D. R. Searle, Superior, has announced the removal of his offices from the Columbia Building to Rooms 106-107, Ryan Building, 1210 Tower Avenue.

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Dr. J. P. Koehler, Milwaukee Health Commissioner, has inaugurated a tire cover that proclaims the advantages of general immunization against diphtheria. The cover has been attached to health department motor cars and to the vehicles of physicians throughout the city. It carries the slogan: Toxin Antitoxin Prevents Diphtheria."

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Dr. G. N. Lemmer, Spooner, has been appointed as city physician due to the absence of Dr. A. E. Costello who was elected to that office last spring.

The Marquette University School of Medicine Alumni held its fourth annual clinic on November 9th. This was presented in conjunction with the university homecoming with Dr. Louis F. Jermain, dean emeritus, in charge. Dr. Paul B. Magnuson, assistant professor of surgery, Northwestern University, addressed the gathering on "The Diagnosis and Treatment of Various Kinds of Backache and Back Injuries." This talk was illustrated with lantern slides. Dr. Daniel N. Eisendrath, clinical professor of surgery, Rush Medical College, presented a paper on "Relation of Urology to Abdominal Diagnosis," and Dr. George B. Eusterman, Mayo Clinic, spoke on "The Ulcer Problem; Some Practical Reflections."

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The many friends of Dr. Charles S. Sheldon will be sorry to learn that he is ill at his home at 311 Norris Court, Madison. Dr. Sheldon has been in ill health for several months following an automobile accident. His strength failed gradually until a month ago when he was forced to give up work. The doctor is more than eighty years old.

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Dr. Evert C. Hartman, who for a number of years has been practicing at Algona, Iowa, has been associated with the Pember-Nuzum Clinic at Janesville, with practice limited to pediatrics.

Dr. Hartman graduated from Northwestern University Medical School in 1908 and is a brother of Dr. Ralph Hartman, who has been a member of the clinic for many years.

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Dr. C. A. Harper, of the state board of health, spoke during November at Green Lake, where he addressed his audience on "The Community Health Problem."

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The Chippewa county board elected physicians for all the districts in the county recently. They are as follows: Dr. H. H. Hurd, Chippewa Falls; Dr. R. D. Cunningham, Cadott; Dr. Hugh McCormick, New Auburn; Dr. J. H. A. Foster of Cornell, physician for Cornell and Holcombe; Dr. W. A. Smith, Boyd; Dr. H. M. Trankle, Bloomer. The duty of the physicians is to look after patients in their respective districts who are county subjects.

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Several cases of poisoning resulting from children eating sample tablets containing dangerous drugs intended for treating live stock have been reported to the state board of health in recent weeks.

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Dr. J. F. Riordan, formerly of Berlin, has opened offices in the Public Service building at Kenosha. He has been in practice at Berlin for the past sixteen years.

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Dr. C. E. Zellmer, Antigo, spoke on "Medical Progress" before the members of the Lion's Club in that city recently.

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After spending one and a half years in eye, ear, nose and throat work in Vienna and other European clinics,

Dr. L. W. Eidam has returned to La Crosse and become associated with Dr. F. A. Douglas. The physicians have offices on the third floor of the State Bank building.

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Three members of the Fond du Lac County Medical Society have been appointed as an advisory committee to assist the county nurse. The members of the committee include: Dr. R. L. Prees, North Fond du Lac, newly elected president of the society, Dr. M. M. Scheid, Rosendale, and Dr. H. J. Hardgrove of Eden. They were appointed by Dr. J. E. Twohig, retiring president of the society.

The function of this committee will be to advise the county nurse concerning health projects which her office may contemplate carrying out in the county from time to time such as chest clinics, toxin antitoxin campaigns, etc. The committee will also provide a contact between the office of the county nurse and the county medical society, which is expected to be of great value in carrying out health programs in the county.

The Dodge county nurse also has an advisory committee of physicians.

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Dr. F. J. Gosin, Green Bay, who spent a month and a half with his brother in Minneapolis, has returned to the city and reopened his office in the Minahan building.

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The Jump River community now has a resident physician for the first time since the death of Dr. C. M. Fuson about a year ago. Dr. Joseph R. Mitchell, Washburn, has become established in Dr. Fuson's former office. He was graduated from the Chicago Homeopathic Medical College in 1899.

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Dr. Francis D. Murphy, head of the department of medicine, and Dr. M. G. Peterman, head of the department of pediatrics, Marquette University School of Medicine, Milwaukee, are charter members of the Central Society for Clinical Research, organized in Chicago recently. The society, composed of members of the teaching staffs of leading midwest universities and medicine research workers, was formed to stimulate and encourage research work among younger men in the universities. Results will be given at annual conventions.

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Dr. James Evans, La Crosse, was the speaker of the evening at the December meeting of the Seventh District Nurses' association held at St. Francis Hospital on the 5th of the month. His topic was "The Oldest Hospital in the World, Still in Existence."

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Dr. Donald E. Faxon, of Chicago, has become associated with the Schiek clinic at Rhinelander, where he will have charge of the department of pediatrics, succeeding Dr. Lloyd Helmes, now of Oshkosh. Dr. Faxon is a graduate of the University of Illinois College of Medicine in 1923.

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Beloit's splendid new gift to itself, the municipal hospital, has been completed, and Beloit physicians and surgeons met on December 4th to select the hospital staff and take up other business incident to inaugurating its service. Dr. A. C. Helm was elected temporary chairman and appointed a committee of five physicians to draft by-laws and a constitution and to suggest various committees. They included: Drs. F. A. Thayer, P. A. Fox, C. F. N. Schram, A. F. Ottow, and W. W. Crockett.

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The constant vigilance Milwaukee exercises to guard against the spread of communicable diseases was told by Dr. Merle R. French, medical director of the bureau of communicable disease of the health department, in a talk to the mothercraft class of the Maternity hospital at maternity health center.

Dr. French outlined the steps mothers should take to guard their children against disease, pointing out the necessity of isolating infected persons and of immunizing persons who may catch the disease.

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Dr. George Warren Newell, Burlington, has established offices in the Majestic building, Milwaukee, where he will limit his work to gastro-intestinal diseases and to surgery. Dr. Newell was graduated from Northwestern University Medical School in 1905 and began the general practice of medicine in Burlington in 1911.

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Dr. F. C. Mock, Milwaukee, spoke before the Professional Men's club at a recent noon luncheon at the Athletic club. His subject was "Popular Mental Reflections of Today."

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Dr. Edward Evans, LaCrosse, Chairman of the Council of the State Medical Society, was taken seriously ill just prior to Christmas. Later reports indicate great improvement.

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The Central States Pediatric society has tentatively set the date for its 1929 meeting as September 28 and 29 at Milwaukee. These will be the days prior to the opening of the American Public Health sessions at Minneapolis. Dr. J. Gurney Taylor, Milwaukee, is president of the Central States Pediatric society.

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Dr. R. P. Potter, of the Marshfield clinic, Marshfield, appeared on the program of the fourteenth annual meeting of the Radiological Society of North America, which was in session at the Drake hotel, Chicago, the first week in December. The main feature of the clinics were discussions of various phases of cancer and methods of treatment.

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A number of talks on the prevention of tuberculosis have been given during the past few months. Among the speakers are: Dr. C. E. Neidhold, Appleton, who addressed the Rotary club of that city, and Dr. A. A. Pleyte, Milwaukee, who spoke before the Kiwanis club at Eau Claire. Dr. T. L. Harrington, Milwaukee, delivered addresses before audiences at Fond du Lac, Monroe and Oshkosh.

Drs. A. E. Bachhuber, Mayville, and L. R. Head, Madison, have been appointed as district managers of the

seal sale campaign conducted by the Wisconsin Anti-Tuberculosis association.

—△—

J. G. Crownhart, secretary of the State Society, spoke on the work of the full time secretary before the President's and Secretaries' conference of the Wisconsin State Dental Society at Milwaukee on December 8th. The State Dental Society anticipates the installation of a full time officer, and those present at the conference pronounced themselves as favorable to the proposal in that organization.

—△—

The University of Wisconsin closed for the Christmas holidays Saturday noon, the 15th of December, instead of the following Wednesday noon, as planned, because of the prevalence of influenza on the campus.

—△—

With the threat of a jail sentence haunting him, Dr. Joseph Lambert, Antigo physician, is very much perturbed. It is almost certain that some time in February the doctor must spend a night behind the bars, languishing for freedom and all that it is said to mean.

Dr. Lambert and other legion officials agreed to spend a night in jail if the local legion post equalled its 1928 membership by February 1, 1929. Believing that Dr. Lambert and the other officials ought to spend a night in confinement, every member of the legion is hurrying to pay his dues and enroll for another year.

—△—

Three Oshkosh physicians, Drs. E. F. Bickel, John F. Schneider and E. J. Campbell, spoke before the semi-monthly meeting of the Candlelight club of that city on Tuesday evening, December 11th, at the Athearn hotel. "Preventive Medicine in Schools and the Underprivileged Child" was the subject under discussion.

—△—

The Milwaukee Academy of Medicine has authorized the trustees to sell the real property now held by the Academy at 153 East Wells Street, Milwaukee, at a price to be determined later and approved by the council and the members of the organization.

—△—

Dr. V. A. Gudex, deputy state health officer, Milwaukee, took issue with the modern physical training offered in public schools in an interesting and instructive address before the members of Neenah club at a noon luncheon during December.

—△—

Through tests for suspected organisms the state laboratory of hygiene in the last few weeks has made a positive diagnosis of five cases of bacillus abortus and five cases of tularemia, commonly known as the rabbit disease, in human beings. The state laboratory of hygiene is prepared to make such tests for any physician in the state desiring its help in making a positive diagnosis in suspicious cases.

—△—

Dr. E. L. Miloslavich, director of the research laboratories at St. Mary's Hospital, Milwaukee, addressed the Medical Society of the Veterans' Bureau on "Pathology of Infectious Diseases During the World War," on November 14th.

—△—

Dr. and Mrs. Gentz Perry, Rhinelander, announce the birth of Alice Luverne on December 12th, 1928.

MARRIAGES

Miss Martha Louise Dedricks, Manitowoc, to Raymond G. Bayles, Chicago, at Chicago, on Thanksgiving Day.

DEATHS

Dr. Frank Edgar Andre, Kenosha, died Wednesday evening, November 14th, at the Kenosha hospital after a long illness from a complication of diseases. Dr. Andre was born in Kenosha, November 12, 1870, and was graduated from Rush Medical College, Chicago, in 1894. He practiced one year in Chicago and then came to Kenosha, where he has since practiced, with the exception of a year spent in the military service and a year at Randolph. Dr. Andre has been the physician to the Kenosha social hygiene clinic since the organization of the work. He is survived by his wife and a son.

SOCIETY RECORDS

NEW MEMBERS

Skogen, T. T., Hudson.
Dorr, A. M., 123 Wisconsin Ave., Milwaukee.
Hervey, J. A., 221 Wisconsin Ave., Milwaukee.
Kohn, S. E., 141 East Wisconsin Ave., Milwaukee.
Robinson, H. P., 1535 Oakland Ave., Milwaukee.
Metts, J. C., 575 Layton Blvd., Milwaukee.

CORRESPONDENCE

CENTRAL STATES PEDIATRIC

December 14, 1928.

Mr. George Crownhart,
Wisconsin State Medical Society,
Madison, Wisconsin.

Dear George:

Please be advised that the next meeting of the Central States Pediatric Society will be held September 27th and 28th, 1929, Milwaukee.

The place of registration will be the Milwaukee Children's Hospital, and the meeting place will be the Tabernacle Baptist Church.

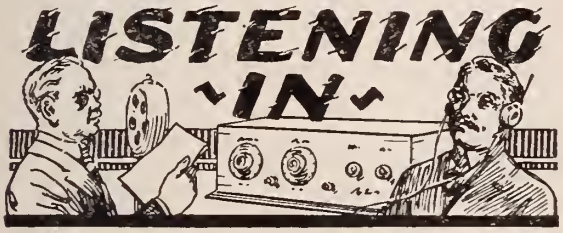
Yours truly,
M. G. PETERMAN, M. D.

SEXTON APPOINTED

The appointment of Dr. W. G. Sexton, Marshfield, to be chairman of the Committee on Scientific Work was announced by President K. W. Doege, early in December. The Committee for the fiscal year will be composed of Dr. Sexton, chairman, Dr. A. W. Rogers, Oconomowoc and Dr. Stanley J. Seeger, Milwaukee. A meeting of

the committee was to be held in January to formulate preliminary plans for the 88th Anniversary Meeting to be held in Madison next September.

Dr. Doege also announced the appointment of Dr. K. W. Doege, Jr., to be a member of the Advisory Committee on Medical Extension. Dr. Doege, Jr., takes the place of Dr. I. G. Babcock, Cumberland.



COUNTY SOCIETY DUES

The Michigan State Medical Journal reports that dues in The Wayne County Medical Society of that state, which includes the city of Detroit, are raised to $30 a year. This permits of the employment of a lay secretary for the county society.

MICHIGAN ADOPTS PLAN

Following the lead of Wisconsin this fall, secretaries of the county medical societies in Michigan will hold their annual conference at the A. M. A. in Chicago in January.

DIXON AFTER DELINQUENTS

In a statement to the press in November, State Prohibition Commissioner Dixon declared that 500 Wisconsin physicians were delinquent in the payment of the state permit fee and that action would soon be taken to revoke the Federal permit of these delinquents. The Secretary secured the list of these delinquents from the Commissioner and offered his services to some 250 physicians who were members of the State Society. As a result, close to 100 cases were dismissed because of error in the records and many other cases were settled by adjustment. Savings to members exceeded $3,000.

TO ASK REPEAL

Following authorization by the House of Delegates, notice was sent some 1,600 members in December that an effort would be made in the next session of the legislature to repeal the state permit law, it being claimed that the federal supervision was sufficient and that the state law affecting physicians had never been enforced because of the effective federal supervision. Members receiving the letter were permit holders and their cooperation was asked in explaining the situation to assemblymen and senators.

PRESENT HYGEIA

Three hundred subscriptions to Hygeia were presented in the name of the State Medical Society as a Christmas gift. These were presented to members of the legislature, state officials, normal school libraries, and other prominent laymen throughout the state.

MINNESOTA ASKS AID

In a letter to their members, the Minnesota State Medical Association asked for general aid to prevent proposed legislation inimical to public health. Among bills to be so introduced in that state, the Association listed the following: an anti-vivisection bill; a virtual repeal of their Basic Science act; a law to license naturopaths; a measure to compel all hospitals supported by taxation to admit chiropractors and naturopaths; and a measure to lengthen the present two-year statute of limitations on malpractice suits from two to six years.

Immunizing of people for diphtheria is having the effect of reducing the rate for this disease, the Wisconsin State Board of Health reports. Nearly 150,000 people in the state have been immunized, most of these being school children. During the past six years the average number of diphtheria cases reported for November was 358. Cities where many children have been immunized are Madison, Oshkosh, Chippewa Falls, Milwaukee, Racine, Beloit, and a number of others. The State Board of Health is of the opinion that the commendable work of physicians in combating this disease by immunizing people is having a marked effect.

* * *

The state is preparing to apportion about $6,000,000 in school funds next year, about $2,200,000 more than ever apportioned before, under the new school equalization law. Counties and districts in the poorer sections, particularly in the north, will get more money under the new plan, while the populous sections in the industrial area will get considerably less.

* * *

The state securities division has put its foot down on stock in muskrat farms where tremendous returns are promised by a generous use of the multiplication tables. An estimate is made of the number of muskrats in some swamp and the area is then licensed as a fur farm. Then stock has been sold on the basis that each pair of muskrat will produce 20 offspring a year. The state refuses to approve stock issues on that basis.

* * *

The state railroad commission has the power to force cities to carry out its orders on grade separations, the supreme court held in deciding a case from Appleton. The commission ordered an overhead structure at a crossing in that city, but the mayor vetoed a resolution which would have carried the order of the commission into effect. The court held that an order of the railroad commission is law and that a mandamus action could be started to force the city to carry out the provisions.

* * *

In less than one month of routine blood tests at the

state hygiene laboratory four cases of tularemia (rabbit fever) have been discovered, according to Dr. W. D. Stovall, director.

States all around Wisconsin have found this disease in rabbits, and it is known to be in this state because persons have been found to have the disease, although as yet no infected rabbits have been discovered.

* * *

The state fur farm law is constitutional and even when a state fur farm license takes in waters that are navigable the holder of the license has the exclusive right to trap animals within the confines marked off in the granting of the license. The decision came in the appeal of a case from Oshkosh where a citizen claimed he had a right to trap wherever he could row his boat from the river. The court pointed out that the right of navigation and the right to trap muskrat are two different things, not depending on one another.

* * *

A closer application of the rules governing the removal of tuberculosis patients to or from sanatoria, with emphasis upon the necessity for reporting such events to the local and state health officers, is urged by the Bureau of Communicable Diseases of the State Board of Health in a letter recently sent to the superintendents of Wisconsin sanatoria. The letter follows:

"The law of Wisconsin requires the local health officer to disinfect a premises upon the death or removal of a patient with tuberculosis in any form. The law also requires a local health officer to see that all necessary precautions are taken by persons with tuberculosis in the disposal of sputum, etc. This refers to local cases living at home. When a person with tuberculosis goes to a sanatorium, it is therefore necessary that the local health officer in the place of jurisdiction know of this removal. Also when an unhealed or active case returns from a sanatorium the health officer having jurisdiction should be informed.

"Legally the Wisconsin law on tuberculosis (Chapter 143.06 of the Statutes) requires the superintendent of each institution to report in writing, within one week's time, the name, age, sex, occupation and latest address of each person afflicted with tuberculosis who has come under its care or observation to the local board of health where the sanatorium is located.

"In addition, Rule 5 of the State Board of Health requires every physician to report in writing, within twenty-four hours, to the local health officer in whose jurisdiction such person with tuberculosis is found, on the regular report card for communicable disease, and where no physician is called the owner or agent of the building where such person is staying must report. The intent of this rule is to inform the proper health officer at the last place of residence of the patient.

"To facilitate the proper following out of tuberculosis work, we are suggesting that those in charge of sanatoria properly inform the health officers last having jurisdiction of the arrival of cases at the sanatoria, upon regular report cards furnished by this office, and that the health officer having jurisdiction also be informed of the discharge of an active case entering his jurisdiction. The town clerk of any community or the State Board of Health can inform you of the name and address of any local health officer. We advise this because many cases of tuberculosis are not reported to local health officers by physicians in attendance."

* * *

At least one branch of the federal government deserves a long vacation, believes B. H. Hibbard, of the agricultural staff of the University of Wisconsin.

And the branch for which he recommends the holiday has to do with the reclaiming of land. This lay off, he suggests, would give annual consumption, time to catch up with annual distribution of farm products.

* * *

An experiment to study the present method of diagnosing tuberculosis in dairy cattle is now in progress at the College of Agriculture of the State University. Members of the divisions of agricultural bacteriology and veterinary science are investigating the small number of cows which react to the tests but which, upon post-mortem examination, never show the characteristic tuberculosis lesions. Preliminary research indicates that some unknown organism closely related to the bacteria responsible for tuberculosis, may make the animals sensitive to the agent used in conducting the test.

* * *

Exactly 27,729 Wisconsin people went to the polls and voted in the presidential election but failed to cast a ballot in the race for the governorship, official election returns compiled here show. The number of those who voted for the rest of the state ticket was even much smaller than in the governorship race.

* * *

About one-tenth of the milk inspected by the state dairy and food department during the past year has been found to be dirty, resulting in warnings being sent to producers to clean up, C. J. Kremer, state dairy and food commissioner, declared.

* * *

Abandoned cemeteries within the confines of city limits may be taken over by cities, the attorney general's office has ruled. The question arose in Racine, where a number of people have become squatters in an old cemetery.

* * *

Athletics is a paying proposition to the state and the university. It is estimated that probably $200,000 has been collected on football games at the university. This money goes into the fund for the improvement of the grounds and the department. Ultimately it will be necessary to build a double deck on the grandstand to care for the increasing crowds.

Secretary of State Dammann has announced that in the past fifteen years the state has had a total net revenue of about $75,000 from boxing matches. A law to permit boxing was passed in 1913. The state receives a five per cent fee out of the gross receipts. Since the law was enacted the state has collected $168,509 and has paid in expenses $94,807, a net profit to the state of $74,094. More than $3,350,000 has been paid for tickets by spectators to Wisconsin boxing bouts in the past fifteen years.

An amendment will be asked by the state industrial Commission to the occupational disease law so that persons suffering of occupational diseases, contracted while in an industry, will be able to collect compensation regardless of whether the employer is insured. A recent case from Montello disclosed that the law was not sufficiently definite to insure compensation in a tuberculosis case, where the employer was not under the full provisions of the law. For this reason a change in the law will be asked.

* * *

The largest enrollment in the history of the state university, 9,042 students, was reached this semester, according to statistics released by Miss A. B. Kirch, univerity statistician.

The College of Letters and Science with 6,681 students again leads all other divisions. The College of Engineering ranks second with 962 and College of Agriculture is next in order with 705 students.

Men outrank the women students by 5,641 to 3,401. There are more men than women in all of the more important courses except the B. A. general course, where the number of women is 1,991 as compared with 1,859 men.

Freshmen number 2,574, sophomores 2,080, juniors 1,595, and seniors 1,383.

Medical Economics*

By MALCOLM L. HARRIS, M. D.
President-Elect, American Medical Association
Chicago

It is a pleasure to me to have this opportunity of welcoming you to the home of our national organization. The mere fact that you are here is evidence of the interest which you take in our organization and I assure you that it is extremely gratifying to those of us who labor here at the home of the American Medical Association. I hope that, if you have not already done so, all of you will take this opportunity to go through the building to learn by personal observation the work that the organization is doing.

I just asked the editor what I should talk about and he said, "About ten minutes," and, as I was just leaving him, he added a postscript that I was to talk about medical economics.

Last summer I had the pleasure of attending an entertainment, the principal actors of which were two men. One of these individuals was as fine a specimen of physical development as one could wish to see, with muscles free and perfect as one could imagine. There was wonderful cooperation and coordination between his central nervous system and his muscles. The other person seemed equally well developed physically; in fact, he was even sturdier and looked stronger, but it soon became evident that there was not that freedom of action, not that precision in his muscle movements nor that coordination between his nervous system and his muscles. In fact, he seemed to be bound or tied in some way—muscle bound we might call it. As a result he lost, which was to be expected.

How many individuals, organizations or institutions fail to attain that success to which they aspire by reason of being tied or bound in some way? Let us take, for instance, the so-called three learned professions—the law, the ministry and medicine. The law seems to be bound by precedent. How many decisions are handed down by judge or court based on precedent and not on a careful analysis of the evidence? How many ministers do we find that are bound by creeds and dogmas so that they fail to win the people as they hoped? The medical profession is bound by tradition.

Occasionally we see judges or courts that have the courage, when a question of great importance to the community or to the people comes before them, to disregard precedent and base a decision on a careful, logical analysis of the evidence presented. Occasionally we see a minister who has the courage to throw to the four winds his creed and his dogma and, by preaching the truth and the right ways of living, brings to him the people. The medical profession should disregard certain of the traditions if it hopes to acquire or obtain its full satisfaction in the work that is laid out to do. By tradition we mean those beliefs, those methods or customs that have descended orally from one generation to another without printed or written memorials.

These traditions have taken certain lines—lines that we call humane lines, altruistic lines and ethical lines. It is surprising how the thoughts and attributes of mankind have been controlled by hereditary beliefs and impulses. By humane lines, I mean what we might call humanitarianism or, as I prefer, humaneness as humaneness does not carry any religious implication such as was first attached

*Remarks before Conference of Secretaries of Component County Medical Societies of the State Medical Society of Wisconsin, Chicago, Nov. 15, 1928.

of kind heartedness, of pity, of sympathy and of to the word, humanitarian. By humane we mean the attributes that result from emotion, attributes of kind heartedness, of pity, of sympathy and of charity. The foundation of the medical profession is emotion. In fact, the medical profession has its origin in the primal sympathy of man with man. This sympathy has inspired in the human heart the desire to relieve human pain and suffering. So we find that medicine is based entirely on emotion. It is the only occupation or vocation that has its foundation in emotion.

The term, altruism, came into prominence in the philosophy of Comte. Comte attempted to create or erect a system of philosophy based on altruism. Altruism meant that the chief end of life was the happiness of others. Alter, as you know, means other, and altru, of the others. His philosophy of life was that it ought to be devoted to the happiness of others. That philosophy adopted by the people in general would have been a very beautiful and lovely thing, but it was impossible, of course, to imbue every person with this idea of working entirely for the happiness of others. The meaning of altruism has changed considerably as life has changed. The word, other, still remains but it has just the opposite meaning—that others should devote themselves to the happiness of all. It seems that "others" in this connection has been transferred in its meaning to the medical profession. In other words the medical profession today seems to be the "other" to which altruism refers as it is the one that is called on to devote its work to the creation of happiness in others.

There is a great difference between humaneness and altruism. Humaneness refers entirely to individuals. It is kind heartedness, it is pity, it is sympathy, it is charity to an individual and its attributes have always been the attributes of the medical profession. We hope these attributes will never grow less in the history of the practice of medicine. Altruism does not refer to individuals; it refers entirely to groups, to sociological groups. The medical profession in its display of any altruistic attributes that it may have is working upon sociologic groups and not on individuals and we must draw that distinction at all times between humaneness and altruism as altruism is understood today.

One of the things that the medical profession is called on to do, under the guise and perhaps urged on by the sophistry of altruism is the doing of public health work free. The medical profession, as you know, is frequently called on to do public health work without any compensation. That does not mean that the medical profession should not step in and take control of health matters in times of emergency such as arise in severe floods or in tornadoes or in any other emergency that calls for the exercise of altruistic work just the same as any other person does by being the only one, perhaps, competent to do certain lines of work. That it should continue to do and it has never been found wanting. In addition to the duty of public health service, the profession is called on to do public school inspection work. That is not an individual work but entirely a group work and the medical profession should not be called on to do this work without proper compensation. Again it is often called on to do infant welfare work. You hear of infant welfare clinics being established all over the country. That is also a group altruistic work and a work that the medical profession volunteers to do without compensation, but it has been found that in doing this free group altruistic work, the medical profession is being imposed on constantly more and more by those who are perfectly able to pay. That is a group altruistic work that the profession should not be called on to do without compensation. Again there is vaccination. The administration of toxin antitoxin in diphtheria is another group service which the profession is called on to do and I do not mean during times of emergency because in any emergency the medical profession is always ready to do more than its duty.

In addition to all group altruistic work, I should like to refer to the work that the profession is called on to do for the benefit of corporations and institutions, which is purely to the financial benefit of the corporation or the organization and not strictly a humane or charitable work on the part of the physician. In this class, I may mention the work done in health examinations for the benefit of insurance companies that desire to have their policy holders examined to determine their physical fitness. The medical profession has been induced, I think I might better say seduced, into doing this work at a very nominal price which is paid to it by the company, organized as a stock company for profit, and the information that the physician is sending to this corporation the corporation takes and resells to the consumer, the person examined, at a profit of four or five hun-

dred per cent. That is one of the classes of work that the profession is doing with the idea that it is doing altruistic work. That is what the corporation tries to make the profession believe; namely, that it is doing a benefit to humanity in furnishing insurance companies with reports of physician's findings and diagnoses of his patients. The physician may have attended a patient or operated on a patient who subsequently applies for insurance. The insurance company writes the physican and asks as a favor to former patient would he kindly send a report of his findings, or of his operation at the time or what the physical condition is at present and whether he thinks the patient a good insurance risk. In other words, the insurance company is getting a medical examination out of the doctor free under the plea that the physician is doing some favor to a former patient. That is an imposition on the profession. It is not an altruistic work nor is it a charitable work to the individual but it is purely a gratuitous work for a corporation that receives the financial benefit.

These, gentlemen, are some of the economic conditions that the profession is laboring under today which I think is entirely up to the profession to correct. The humane feature of the profession, there is never any question about and there never will be. The profession will always be humane and humaneness will be its most noble attribute. But what I should like to impress on you is that there is a great difference between humaneness and altruism as altruism has come to mean today. I wish to leave with you the definition of these terms and I hope that you will work out the problems and see clearly the distinction and difference between humaneness and altruism as it is termed today.

Collections and Collection Methods

By J. G. CROWNHART
Secretary, State Medical Society of Wisconsin
Madison

"Collection agency contracts are frequently the equal of a Chinese puzzle with clauses in fine print that would take three Philadelphia lawyers to interpret."

So declares Mr. Lee Siebecker, Assistant Secretary of State of Wisconsin.

Practically every physician in Wisconsin has some time been the dissatisfied client of a collection agency and because these occasional complaints form a never-ending line of letters across the desk of the Secretary of your State Medical Society, this article is written. We must concede that the average collection agency receives not your readily collectable accounts but your old ones. On some of these accounts possibly the statutes of limitations has run; on others the patients have moved and moved and their present whereabouts are unknown to the physician, and on still others ability to pay is questionable and inclination to pay may be entirely lacking. We must admit that an agency is very apt to have to resort to strong tactics if they are to make collections on accounts such as these.

So it is that we mention our first warning,—be careful that collection methods are not those that will bring a counterclaim of malpractice on your head. This is not infrequently resorted to by the unscrupulous as a method of forcing the physician who has pressed his claim within two years, of abandoning it forthwith.

Before you sign a collection agency contract watch for these points:

How long does the contract run? Many of them run for two years or more and you could not cancel it if you wished.

How often is the agency to report to you on what has been collected? If no period is stated you may not know how you stand until the end of the contract.

What is the filing fee? Practically every agency charges from 15 to 50 cents or more on each account you give them. This is known as a filing fee to cover the cost of checking the address and like work. If it is high and you give them a hundred accounts you may be out money instead of being ahead.

What accounts is the agency to have? I have seen one contract where the agency was to receive every account that had run over three months, during the life of the contract. Perhaps you wish to do this but possibly not.

What commission will the agency charge you? This generally varies depending upon whether they collect by letter or have to sue. What is the percentage for the first is rarely the percentage for the latter and generally it is high where they sue. A concern of no standing may commence legal action on every account so as to collect the larger commission.

By whom is suit authorized? Does the contract give the agency the right to determine who shall be sued and when? It is a right you should retain for yourself.

Is the agency operating from a lockbox? Then be sure that you, at least, know the names of the individuals in the concern, their home address, and how long they have lived in the city.

What is the standing of the company? This your bank can tell you or will find out for you without any charge. Take advantage of this privilege and know with whom you are dealing.

What physician in your city, in your county or nearby has been with the agency for two or three years and is thoroughly satisfied with their work? When they give you such a reference, write and find out.

Is there a flat membership fee? Some agencies charge each physician a flat fee of from $25 to $50. For this they agree to handle so many accounts a year and additional accounts are charged over and above the fee at a nominal rate. If you pay a $50 flat fee and are entitled to file one hundred accounts this is the equivalent of a filing fee of fifty cents. That is all right possibly but will you file one hundred accounts during the year? If not, divide $50 by the number you anticipate and arrive at the filing fee. If you have but fifty accounts you will thus pay a filing fee of a dollar apiece which is a high rate.

Do you agree that information you furnish the agency can be "passed on" to other subscribers? Be careful for there is legal liability connected with this. You will be held legally liable to the extent that the information is accurate, that the account is past due, that the account is not a contested one and that you have made no error.

What is the agency going to charge you on "out of town" accounts? Frequently these appear in the small type with a much higher filing fee therefor. Know what you are going to pay.

What assurance have you that the agency will press all your accounts and not simply concentrate on the large ones where the commissions will be handsome?

The State Bar Association has established certain minimum charges for collection work that may serve as a guide to you in determining whether your agency is charging you a high rate or not. Ask your attorney what he charges.

Remember that a contract half a page long can be so worded as to include items and clauses as would take an ordinary man a page to relate. Read your proffered contract carefully and submit it to your attorney if your collections are important. Let him diagnose it for you,—it may be money well spent for if you discover you have made a mistake it may be over a year before the contract expires and if you arbitrarily withdraw your accounts the collection agency may have an action against you.

In the last few years only two collection agencies of the several that have proffered advertising to the Wisconsin Medical Journal have been accepted and because the writer believes that collection agencies are a last resort rather than first aid, there will appear in an early issue the first of three articles on collections and collection methods written by R. R. Aurner, Assistant Professor of Business Administration, School of Commerce of the University of Wisconsin. Watch for these three articles.

State Society Asked to Help Curb Medical Advertising Frauds; State Officials Plan Cooperative Campaign

That the State Medical Society may be asked to act as a clearing house for reliable information on fraudulent medical advertising that appears in the lay press, was forecast in late November when Mr. Montgomery of the State Department of Markets and Mr. Emil Pladsen, State Treasury Agent, called at the Society offices to ascertain what help the State Society might be able to render.

It seems probable that a conference of publishers will be called in the near future to discuss the subject of all fraudulent advertising, but because of the fact that fraudulent medical advertising presents the most immediate problem it is likely that first efforts will be directed towards eliminating the fake "cures" and "remedies" that contain dangerous drugs unless administered under immediate direction of a physician.

Both state departments have been working on this problem for several years and this preliminary work will form the background for the suggested conference. State officials were advised that the

State Medical Society would cooperate to the utmost in this program but that the invitation for aid must come from the publishers at the conference for there was no disposition on the part of the Society to enter into a program uninvited which might in any way bring resentment from the publishers against the State Society, which, they might assume, was attempting to dictate their policies from a selfish interest.

"It would be a source of considerable expense to the Society," declared Mr. Crownhart, Secretary, at the meeting, "but I am confident that the Society will provide the necessary funds if the publishers would like an information service furnished them pointing out what remedies are fraudulently advertised or are actually dangerous to the public health."

A national conference somewhat similar to the state meeting proposed was recently held at New York City and the Wisconsin Medical Journal pledged itself to cooperate in the national movement to prevent fraudulent advertising of all kinds. The national conference selected the National Better Business Bureau as its medium through which information will be sent publishers respecting medical and other frauds.

In speaking before the national conference, Mr. William E. Humphrey, Chairman of the Federal Trade Commission, declared:

"The people are annually robbed of millions of dollars by false and misleading advertisements that appear in the periodicals of the country. Some are patently false, some are near the border line and in the twilight zone. Of these I do not now especially speak, but of those that are openly and shamelessly false on their face, those about which no reasonably intelligent man would be mistaken. This class of advertisement takes its toll of millions annually from the sick, the unfortunate and the ignorant; those that are ready to try anything as a forlorn hope.

"How can this gigantic evil of false advertising be suppressed? The Department of Justice, the Post Office Department, and the Federal Trade Commission have waged war unceasingly against it. But the result has been most unsatisfactory and discouraging. What of the responsibility of the publisher? He becomes part of the plan. Without his assistance the consummation of the scheme would be impossible. Knowingly or unknowingly the publisher helps rob the unfortunate victim. He brings the victim and the crook together. He shares in the ill-gotten gains. In publishing such advertisement the publisher is violating the law. He is guilty of an unfair practice. In a suit by the Federal Trade Commission to suppress such advertising, the publisher is not only a proper party but under recent decisions, he is a necessary party. The Commission, as a public duty that it is under every obligation to perform, should make the publisher a party to all suits against fraudulent advertising by publication. These facts in regard to their responsibility seem not to be generally understood by the publishers. This is the outstanding reason why the Commission has called this conference.

"We come, asking the publisher to take up this question and do what he can voluntarily to eliminate this great evil. And certainly it would be of tremendous advantage to the publishing industry to voluntarily abandon any unlawful practice rather than to be forced to do so through the courts. More protection can be given to the public by your cooperation than by years of litigation. Without your assistance, it is an endless and almost hopeless task."

1929 Medical Blue Book Published

A ninety-six page Wisconsin Medical Blue Book containing a digest and summary of all important laws and regulations affecting Wisconsin physicians, was distributed to the members of the State Medical Society the first week in January. Many additions and revisions over the 1928 issue will be found including a listing of members by cities, a listing of hospital facilities in Wisconsin, and abstracts of many minor laws about which members have frequently enquired.

The cost of publication is financed by the State Society as a service to its members. The printing costs alone exceed $900. The publication is priced at $10 for public sale.

Following publication of the 1928 issue, many recipients advised the Society that they had saved more than their total dues by availing themselves of deductions and depreciations allowed physicians under the income tax laws, summarized in the Blue Book, which was previously unknown to them.

THE JOURNAL BOOK SHELF

Diabetic Manual for Patients. By Henry J. John, M. D., director of Diabetic Department and Laboratories of the Cleveland Clinic. Price $2.00. C. V. Mosby Co., St. Louis, 1928.

Bacteriology for Nurses. By Charles F. Carter, M. D., director Terrell-Carter Laboratory, Dallas, Texas, and of the Laboratories, Parkland Hospital. Illustrated. Price $2.25. C. V. Mosby Co., 1928.

Diabetes Mellitus, The Treatment of. By Elliott P. Joslin, M. D., clinical professor of medicine, Harvard Medical School; consulting physician, Boston City Hospital; physician to New England Deaconess Hospital. Octavo, 1006 pages, illustrated. Cloth, $9.00 net. Lea & Febiger, Philadelphia.

Nasal Neurology, Headaches and Eye Disorders. By Greenfield Sluder, M. D., clinical professor and director of the Department of Oto-Laryngology, Washington University School of Medicine, St. Louis. With 167 illustrations, including two color plates. Price $11.50. C. V. Mosby Company, St. Louis, 1927.

Syphilis. By Charles C. Dennie, M. D. Price $2.50. Harper & Brothers Publishers, New York City.

Urology, Textbook of. For students and practitioners. By Daniel N. Eisendrath, M. D., attending urologist, Michael Reese and Memorial Hospital, Chicago, and Harry C. Rolnick, M. D., associate urologist, Mt. Sinai Hospital, and adjunct urologist, Michael Reese Hospital, Chicagó. Illustrated. Price $9.00. J. B. Lippincott Co., Philadelphia.

BOOKS RECEIVED FOR REVIEW

Outlines of Pathology in its historical, philosophical, and scientific foundations. A guide for students and practitioners of medicine. By Horst Oertel, Strathcona professor of pathology, McGill University, Montreal. Renouf Publishing Co., McGill College Avenue, Montreal.

Partnerships, Combinations and Antagonisms in Disease. By Edward C. B. Ibotson, M. D. Fellow Royal Society of Medicine, London. Illustrated. Price $3.50 net. F. A. Davis Company, Philadelphia.

Roentgenology. Its early history, some basic physical principles and the protective measures. By G. W. C. Kaye. With forty-nine illustrations. Price $2.00 net. Paul B. Hoeber, Inc., New York.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Secretary, Mr. J. G. Crownhart, 153 E. Wells Street, Milwaukee, Wisconsin. These new books will be loaned for an inspection period only.

Treatment of Disease in Infants and Children. By Hans Kleinschmidt, M. D., professor of Pediatrics, University of Hamburg. Authorized translation of the fifth German edition with additions by Harry M. Greenwald, M. D., attending pediatrician to the United Israel Zion Hospital, Brooklyn, N. Y. P. Blakiston's Son & Co., Philadelphia.

This book is a rather brief compendium of pediatric treatment according to the German school. There are many practical and valuable suggestions as to treatment and a large number of prescriptions. Additional notes by the American translator add to the value of the treatise and indicate the divergence between some of our methods and the German ones. This volume is not for the student, but for general practitioner and the pediatrist, and for them it should prove a good book to add to their libraries.

R. G.

Infancy and Human Growth. By Arnold Gessell, M. D., director, Yale Psycho-Clinic, professor of Child Hygiene, Institute of Psychology, Yale University. The Macmillan Company, New York, 1928.

Dr. Gessell's book covers a field that is of supreme importance to the physician, that of mental development in infancy. He has worked out a number of simple tests which can be used to gauge the mental progress of infants and these can be used by everyone. With careful study mental retardation can be diagnosed at an early age and perhaps an accurate prognosis can be given. The field of superior mental development is also considered. The material in this book cannot be found in the average pediatric text and therefore Dr. Gessell's book should be read by everyone who takes care of children. R. G.

The Simple Goitres. By Robert McCarrison, M. D., associate fellow of the College of Physicians, Philadelphia. Price $4.00. Wm. Wood & Company, N. Y., 1928.

This book contains the subject matter of a report to the International Conference on Goitre held under the auspices of the Swiss Goitre Commission at Berne, in August, 1927.

The author divides the book in two parts. The etiology and epidemiology of "simple goitre" are discussed in Part I. In Part II are sixty-three pages of diagrams and illustrations. He describes three types of "simple goitre." The subjects of food deficiencies, food excesses, polluted water supplies, gastro-intestinal infections and insanitary conditions of life are discussed in their relation to "simple goitre." In the addendum there is a valuable brief discussion on the distribution of iodine in foodstuffs.

This book is a summary of the well-known work done by the author in goitre during the past twenty-five years. Many points relating to "simple goitre" are cleared up in this report. It is needless to add that this book makes very interesting and instructive reading, and is a very important one, especially for physicians living in the goitre belt. F. D. M.

Operative Surgery. By J. Shelton Horsley, M. D., attending surgeon, St. Elizabeth's Hospital, Richmond, Va. With 765 illustrations. Third edition. Price $15.00. C. V. Mosby Company, St. Louis, 1928.

The author has succeeded in keeping this volume from being a treatise on technique. The underlying principles in operative surgery are discussed at length, and the pitfalls to be avoided are outlined.

The manner in which abnormal tissue may be dealt with to aid in its return toward normal is stressed far more than the mechanical steps of the operation. Physi-

Patient Types . . .

The Obstinate Case

The patient with an obstinate case of constipation is generally addicted to self-medication and "tries everything." Each bowel-whipping cathartic simply drives the tired bowel from bad to worse.

The doctor knows it is possible to restore the normal daily "habit time" of bowel movement by appropriate diet, exercise and the mechanical aid afforded by Petrolagar.

Petrolagar is more palatable, more thoroughly softens the feces, is less likely to leak and, having no deleterious effect on digestion, is prescribed in preference to plain mineral oil.

Petrolagar

DESHELL LABORATORIES, Inc.,
536 Lake Shore Drive,
Chicago Dept. 1.

Gentlemen: — Send me copy of the new brochure "HABIT TIME" (of bowel movement) and specimens of Petrolagar.

Dr.....

Address.....

.....

ology is not lost sight of, and the ultimate aim of surgery —to aid in the restoration of organs to normal function— seems to be in the author's mind constantly.

The more widely accepted types of operations are described clearly with good accompanying illustrations. Far more important are the discussions as to the reasons for performing these particular operations to gain the desired result. The book is an excellent one for students of surgery. F. R.

JOURNAL CLINICAL CLUB

University of Wisconsin

ETHER

Nitardy, F. W., and Tapley, N. W.,
British Jour. of Anaesthesia, Vol. VI, p. 53, July, 1928.
"Stability of Anaesthetic Ether"

Peroxides develop in pure ether, when stored in ordinary containers (tin cans, glass bottles) within six months after manufacture. At indefinite times thereafter aldehyds appear (peroxides disappear), then aldehyds disappear, leaving as an end product organic acids.

The chemical change is due to a catalyst and it has been found that copper acting as an anticatalyst prevents this change. Ether in contact with copper has been found to be peroxide free after a period of two and one-half years. It is recommended that ether be stored in copper-lined containers.

INTRATRACHEAL ANESTHESIA

Guedel, A. E., and Waters, R. M.,
Current Researches in Anesthesia and Analgesia, Vol. 7, p. 238, July-August, 1928.
"A New Intratracheal Catheter"

Herein is described an intratracheal catheter upon the body of which is mounted an inflatable rubber bag for the purpose of completely blocking off the larynx during intratracheal anesthesia.

ANESTHESIA INTRAVENOUS

Donald, John,
British Jour. of Anesthesia, Vol. V, p. 112, January, 1928.
"Methylpropylcarbinol Urethane" (Hedonal)

An intravenous anesthetic agent used ten years ago on animals and with early clinical use in St. Thomas Hospital, London, by C. N. Page.

Character of the anesthesia is more like pure hypnosis than of the nature of hypnosis produced by ether or chloroform.

The advantages of the drug as stated are: great muscular relaxation, no degeneration of liver, kidneys or heart; no irritation of the respiratory tract, especially advantageous in cases of low tension or hemorrhage.

Given by mouth as a precursor to chloroform, the quantity of chloroform required being greatly reduced.

"Variations of Streptococci With a Note on Hemolysin Production"

Frobisher, M., and Denny, E. R.,
Baltimore, Md.
Journal of Bacteriology, August, 1928.

The authors describe the recognized varieties of streptococci in relation to hemolysis on pour plates and point out some of the reasons why there may be confusion in classifying an organism by its ability to produce hemolysin. They show that some hemolytic streptococci are weakly hemolytic and may be mistaken for alpha types, and that some strains of viridins are strongly hemolytic and may be mistaken for hemolytic strains. They show that if poured plates and test tube tests for hemolysis are run as checks one upon the other that mistakes are less likely.

SUMMARY AND CONCLUSIONS

1. For the study and proper classification of streptococci in blood agar the following are essential:

a. Differentiation of types based on low power microscopic observation of deep and not of surface colonies in blood agar plates.

b. Use of tube hemolysin tests with properly prepared cultures to supplement plate observations.

2. Genuine, alpha type streptococci have frequently been encountered which possess very marked hemolytic powers producing hemolytic zones 2 to 4 mm. wide and appearing, to the naked eye, to be beta type (Hemolyticus) streptococci. These strains never caused hemolysis when their broth cultures were mixed with red cell suspensions. When the deep colonies of such streptococci in blood agar pour plates were viewed with the low power microscope, they were seen to have about them, inside the hemolytic zone, the zone of methemoglobinized cells common to all alpha type streptococci.

"Variations of Streptococci With a Note on Hemolysin Production"

SUMMARY AND CONCLUSIONS

3. A number of such streptococci have been found to lose a large part (not all) of their hemolytic powers after being kept for some time under various artificial conditions and to appear like the ordinary and easily recognized alpha type of streptococcus. The diminution of hemolytic properties may be due to a change in the organism or to some obscure variation in technique.

4. It is suggested that some of the reported mutations in which a beta type streptococcus has been said to change into an alpha type streptococcus may be due to failure to recognize the true character of the organism in the first place, accompanied by a diminution of the original hemolytic properties.

5. It is possible that many of the anomalous results of many sorts reported by investigators of streptococci may be due to confusion in identification of alpha and beta types.

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Heart Disease; The Bacteriology*

By WILLIAM S. MIDDLETON, M. D.
Madison

Notwithstanding the exclusion of syphilis and arterio-sclerosis from the present consideration, the range of the subject is quite wide. Recent studies have extended the knowledge of the etiologic relationship of bacterial forms to cardiac lesions considerably. A detailed technical dissertation on the biologic and cultural characteristics of the various micro-organisms would avail the general practitioner but little, whereas a consideration of the mechanism by which such agents induce cardiac disease would seem clinically useful.

From this viewpoint Swift[1] has effected an interesting division of the cardiac lesions in infections, as follows: 1) toxic; 2) allergic; 3) bacteremic and immune; 4) bacteremic, toxic and cachectic. These designations are self-explanatory, but differences of opinion arise in the specific application of such generalizations to the several clinical and pathological entities. In any event the plan affords a working thesis upon which to approach the problem. In general, bacterial toxins are prone to attack neuro-muscular structures rather than serous membranes. On the other hand allergic reactions and direct bacterial invasion may occur in any tissue. Toxins may be elaborated directly by bacterial growth or they may arise from the action of bacteria on the fixed tissues of the body. Bacterial toxins are classified as exo- or endotoxins, dependent upon their extrusion from or maintained presence in the bacterium until its disintegration. Allergic states may develop as the result of the sensitization of the human or the experimental animal to a focus of bacterial invasion. The cellular reactions of the elements of the heart to such a state afford a fertile field for research. Bayne-Jones[2] demonstration of capillaries in the heart valves established the route for the direct bacterial invasion in endocarditis. Minute bacterial emboli in such sites constitute the mechanism of pathogenesis of the valvular lesions, although certain observers still maintain the possibility of an infection of the valves by way of the blood passing through the heart chambers.

Among the infectious offenders the rheumatic fever group unquestionably accounts for an overwhelming majority of the cardiac lesions, especially if recurrent tonsillitis, chorea and erythema nodosum be included under the same generic heading. Ward and home outbreaks support their communicable nature. Further importance attaches to this group of diseases by reason of the widespread distribution of their cardiac complications. Carditis, with involvement of the pericardium, myocardium and endocardium, is the rule, and the Aschoff body constitutes a specific type of reaction in the heart muscle in rheumatic fever. Much study has been devoted to the investigation of the bacteriology of this condition in recent years. Based on such observations as those of Poynton and Paine,[3] Rosenow,[4] Swift[5] and Small[6] there would seem to exist a measure of unanimity as to the primary responsibility of some form of streptococcus for the infection. The route of invasion is generally agreed to be by way of the tonsils or lymphoid tissue of the oro- and naso-pharynx. Here harmony ceases. First, a division of bacteriologists into two schools has arisen as to the specificity of the causative streptococcus. Further difference has developed over the manner of operation of the focal infection. One group holds to the opinion that a bacteremia occurs from the primary focus with secondary focalization in the heart, while a second group maintains that the focal infection operates upon the heart through the absorption of toxins. Still another opinion pertains, of a sensitization to a bacterial protein with resultant pathologic changes in the heart and other tissues.

The failure to isolate the responsible streptococcus with any measure of regularity from the blood stream argues against a bacteremia in rheumatic fever. Small[7] insists upon the specificity of the non-hemolytic streptococcus, which he has isolated from the throats and, in a few instances, from the blood of rheumatic fever cases, and termed the Streptococcus cardioarthritidis. The

*From the Department of Medicine, University of Wisconsin. Presented before 87th Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, Sept., 1928.

claim for its specificity is based on; a) its association with the disease; b) its ability to produce experimental lesions in animals; c) its agglutinins in the patient's serum; d) its opsonins in the patient's serum." In this work a parallelism between scarlet fever and rheumatic fever has been suggested by the evidence of a therapeutic potency in an antitoxic serum. Corroboration of these details would greatly advance the knowledge of the pathogenesis and the treatment of rheumatic fever. Swift[8] has remarked the development of an allergic state in experimental animals in which a focus of streptococcic infection has been created. This allergic reaction is abolished by the removal of the focus; and Swift compares the phenomenon to the tuberculin reaction rather than to a serum sensitization. Of significance has been his inability to demonstrate a specificity of reaction to any one of a series of non-hemolytic streptococci. It is an interesting clinical observation that evidences of cardiac incompetency rarely complicate the primary attack of the causative disorder, although over one quarter of such cases have persistent endocardial lesions and of necessity a much higher percentage, some cardiac injury. The incidence of cardiac complications mounts rapidly with recurrences of rheumatic fever.

Sharply contrasting with the cardiac affections of the rheumatic fever group may be considered malignant endocarditis. A blood stream infection constitutes the route of invasion of the valves. In the acute ulcerative type, secondary to wound septicemia, puerperal fever, erysipelas, meningitis, influenza, gonorrhea or pneumonia, the respective bacteria of the underlying disease may be isolated from the blood, but the streptococcus hemolyticus is by all odds most commonly responsible. Staphylococci rank next in frequency and abscesses of the myocardium are particularly common in staphylococcemia. The subacute form of malignant endocarditis has received its warranted attention through the studies of Schottmüller,[9] Osler,[10] Libman[11] and others. In this type the usual etiologic organism, the Streptococcus viridans, enters the blood stream through an infected site in the nose, throat or elsewhere and by preference attacks the valves previously damaged in the course of rheumatic fever. Very infrequently the Bacillus influenzae or the gonococcus may be the causative agent. The absence of serious local reaction to call attention to the original point of entrance of the infection is quite characteristic in the subacute form. Although blood cultures are not continuously positive in either of these highly fatal forms of endocarditis, yet perseverance in these examinations is usually rewarded by positive returns. Myocardial degeneration frequently results from the toxemia in both forms of the disease, but ordinarily this circumstance has no influence on the clinical course of either type. Death ensues from embolism, cachexia, toxemia, bacteremia or combinations of these factors.

Another disease of streptococcic origin, scarlet fever, presents interesting features in its cardiac complications. Its etiologic agent, the Streptococcus scarlatinae, elaborates from its seat of proliferation in the throat an exotoxin which has been proved responsible for most of the clinical manifestations of the disease. It is at present assumed that the myocardial degeneration of scarlet fever is of toxic origin. Changes in the conduction system may also occur under the same circumstances. Swift[1] suggests that the later cardiac complications of scarlet fever are allergic. Scarlatinal septicemia is probably responsible for the uncommon cases of endocarditis and pericarditis in scarlet fever. Note has been made of the occurrence of malignant endocarditis as a complication of erysipelas. Under such circumstances a streptococcemia has supervened, and concurrent pericarditis has also been reported. The antitoxic sera for scarlet fever and erysipelas have proved impotent in the control of septicemia complicating these diseases.

Diphtheria affords the most generally accepted example of an adverse reaction upon the heart by a bacterial toxin. The offending organism, the Bacillus diphtheriae, invades the upper respiratory passages as a rule, and from this site a soluble toxin is absorbed into the blood stream. This toxin has an unusual predilection for the neuromuscular mechanism of the heart. Hence faulty conduction and myocardial degeneration constitute the cardiac insults of the disease. These complications are characterized on the one hand by their insidious development and on the other hand by a tendency for complete and sudden subsidence of symptoms and signs in favorable cases. The endocarditis of diphtheria is in all probability invariably the result of secondary bacterial invasion and therefore not truly diphtheritic.

Many observers rank influenza as one of the rarest causes of cardiac disease. In our experience endocardial and pericardial complications are in-

deed unusual, but errors of conduction have been relatively common in individuals convalescent from influenza. In several instances auricular fibrillation has arisen without other attributable etiology and in one case permanent myocardial injury has been subjectively and objectively demonstrable over a period of ten years succeeding the attack of influenza. The etiologic agent in influenza is still in doubt; but the development of the above mentioned complications in certain of the milder cases without pulmonary involvement tends to incriminate the virus, whatever it may be.

The Bacillus typhosus invades the blood stream; but in the myocardial degeneration complicating typhoid fever, the toxic and the allergic factors are probably operative. Endocarditis and pericarditis of proved typhoid origin have been reported. Lobar pneumonia may likewise induce myocardial change through the products of growth of the pneumococcus or their action on the tissues of the host. In the case of lobar pneumonia there is the added mechanical factor of an increased load on the right heart. Furthermore, ulcerative endocarditis occasionally complicates pneumonia as the result of a bacteremia. Purulent pericarditis usually occurs by direct extension from the involved lung or pleura. The list of infectious diseases might be extended to include practically the entire group in which parenchymatous change may occasionally occur in the heart muscle from the toxemia or involvment of the serous membranes of the heart appear as the result of secondary bacterial invasion; but brief mention must be made of two other infectious diseases, cerebro-spinal meningitis and tuberculosis, which may affect the heart. As previously noted, the meningococcus may occasionally cause ulcerative endocarditis by direct blood stream invasion. Pericarditis may also arise from this organism. Either complication of cerebro-spinal meningitis may determine its fatal termination. The tubercle bacillus finds an unusual resistance in the myocardium; but it may excite pathologic changes in the endocardium and pericardium. The former is affected only in event of miliary invasion, whereas the latter may occur by the same route or independently of such widespread involvement either by direct or by lymphatic extension. The failure to demonstrate tubercles in chronic adhesive pericarditis of unquestionable tuberculous origin is given as ample grounds for assuming a toxic origin. Although any of the anatomic types of pericarditis may occur in tuberculosis, this involvement is rarely the direct cause of death.

CONCLUSION

In conclusion it should be pointed out that streptococcic diseases appear to have a specific affinity for the heart. Hence, a high percentage of cardiac affections is attributable to a streptococcic origin. Toxins attack by choice the myocardium or the conducting mechanism of the heart. Allergy may find expression in lesions of any or all of the histologic components of the heart. Bacteremia is usually attended by toxemia and immune reactions, and pathologic changes may occur in all three elements of the heart in response to a blood stream infection. From the standpoint of immediate prognosis toxic and allergic involvement of the heart would appear less dangerous than bacteremic invasion. A knowledge of the mechanism of cardiac involvement in the several bacterial diseases should exact prophylactic measures in the eradication of portals of entry and in the protection of the heart in such infectious disorders.

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For discussion see page 53.

SYPHILITIC THERAPY

The Journal of Chemotherapy for October (Volume V, No. 3) contains an interesting article on "The Chemotherapy and Biologic Therapy of Malignant Tumors" by Dr. John A. Kolmer. There are, also, articles on "The Chemotherapy of Protozoan Infections Other Than Syphilis," "Syphilitic Therapy," and "Liver Treatment in Secondary Anemia," also "New Views on Chemotherapy of Cancer," editorials, abstracts, and therapeutic views.

This quarterly journal will be sent gratis to physicians interested in chemotherapy, research and the treatment of syphilis. For copies address the Dermatological Research Laboratories, 1720 Lombard Street, Philadelphia, or the Abbott Laboratories, North Chicago, Ill.

Heart; X-Ray Examination*

By FRED J. HODGES, M. D.
Roentgenologist, St. Mary's Hospital, Madison

In the diagnosis of heart disease the use of roentgen methods has won itself a place of importance comparable to the determination of basal metabolism in thyroid conditions. It may be said that the chief value of x-ray studies of the heart lies in their ability to yield accurate information concerning the size of this organ. To be sure, cardiac displacement and abnormalities of the great vessels can also be determined in this manner, but measurement of size will probably always remain the most important result of such an examination.

The examining physician is always interested in knowing whether or not a given heart is hypertrophied, for cardiac enlargement is known to go hand in hand with cardiac failure, whether partial or complete. To be sure, massive cardiac hypertrophy is easily recognized without the use of x-ray, but in a very large percentage of the patients who come for cardiac examination the actual proof of the existence of disease is difficult and it is here that relatively small deviations from the normal in the matter of area and transverse diameter of the heart shadow become most significant. Everyone who sees many heart patients will agree that many of these individuals come for examination because of the previous discovery by some examining physician of a heart murmur. Very frequently this heart murmur may be the only sign or indication of pathology and when it can be shown that there is no appreciable increase in heart size, whether by percussion or by x-ray methods, the examiner can say with more assurance than he could otherwise command that this particular murmur is functional rather than organic. It is comforting to have one's convictions borne out by accurate measurement in a situation of this sort.

In the issue of May 1926 of the Archives of Internal Medicine there is an article written by F. J. Hodges and J. A. E. Eyster, to which is appended a table (Figure 3) from which the ready computation of the most probable normal area and transverse diameter for any given individual can be estimated from age, height and weight. The matter of actually measuring area and transverse diameter is a very simple x-ray procedure, best accomplished fluoroscopically with some form of orthodiascope. Such an instrument makes use of parallel rays only and therefore gives exact frontal plane contour, recorded by perforations in a sheet of paper. The completed outline is quickly measured with a planimeter reading in square centimeters and by comparing the actual measurements with the prediction figures, percentage variation from the normal is readily obtained.

Practically speaking the normal limits of error are plus and minus 10 per cent from the normal —comparable to basal metabolism readings—and only when a variation of more than plus 10 per cent is obtained is a heart considered to be hypertrophied.

For several years this method has been employed by various workers with very satisfactory results and its simplicity, rapidity and accuracy recommend this method for more frequent employment in the field of cardiac diagnosis.

The physician who does not make use of the basal metabolism determinations to judge the status or progress of thyroid dysfunctions will not be interested in the results to be obtained by the use of x-ray methods in the study of his heart cases, for the value of the two procedures is closely comparable. The prediction of normals is equally accurate, within 10 per cent. Both methods are easily employed, cardiac measurement being more quickly done.

If the roentgenologist in your community has not been able to furnish you with percentage variations in area and transverse diameter in the past, ask him to develop the proper technique for you. If he chooses to use the seven foot film method, ask him to check his set up by filming a disc of lead mounted five inches from the film and work out the correction factor for his machine. If he chooses to develop the fluoroscopic or orthodiascopic method, give him time to acquire speed and accuracy.

Random judging of heart size as "Hypertrophy grade 1-4" means unconsious employment of the Danzer ration (cardiac diameter: chest diameter) which Eyster has shown to rate only eighth best in ten methods of estimation of normal. The factor of error is far too great.

Repeated heart size determinations are of value in studying progress in a case of heart disease.

For discussion see page 53.

*Presented before 87th Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, Sept., 1928.

Coronary Infarction With Survival*

By JAMES A. EVANS, M. D.
La Crosse

The diagnosis coronary infarction having been first recognized from post-mortem studies and the syndrome developed therefrom in retrospect, this vascular accident has generally come to be regarded as almost invariably fatal. However, with the more general and complete understanding of its symptomatology, more and more has this syndrome come to be distinguished by clinicians from cases of true angina pectoris, and cases of lesser severity recognized with survival.

Only three articles in the enormous literature, which has recently sprung up on coronary occlusion, have been devoted entirely to the consideration of these milder cases with recovery. Luten[1] reported three cases in 1927 who survived 1 year, 5 months; 1 year, 6 months; and 1 year 10 months respectively. Levine[2] in 1925 reported five cases with survival to the time of writing of from 8 months to 1 year, 10 months. Pardee[3] reported one case living up to time of publication in 1927, 3 years and 3 months. Hamburger[4], in an article not devoted exclusively to cases with recovery, reports he has seen several cases who have led fairly active lives for a period of 5 years or longer, giving no specific figures. Willus[5] makes the statement that one-half the cases of coronary occlusion die immediately and one-half survive a few days to months or even years.

That cases do survive has long been recognized, however, by clinicians. Herrick[6], for instance, in 1919 classifying coronary thrombosis cases as follows:

1. Cases of instantaneous death in which there is no death struggle.
2. Cases of death within a few minutes or hours after obstruction.
3. Cases of severity in which death is delayed for several hours, days or months, or recovery occurs.
4. A group that may be assumed to exist embracing cases with mild symptoms, for example, a slight precordial pain ordinarily not recognized as due to obstruction in the smallest branches of the coronary arteries.

The reason for survival of course lies in the fact that only a small vessel may become occluded and therefore only a small area of heart muscle be infarcted; or granted a large area be infarcted, the capillary anastomoses are capable of establishing a collateral circulation sufficient to maintain nourishment to prevent a fatal thinning, scarring, and final rupture of the ventricular wall. Indeed, such a rupture is sometimes the late result of an old infarction from which the patient may have survived a considerable length of time. Wearn[7] has demonstrated beautifully the capillary bed of the heart and anastomoses formerly thought to be non-existent in the coronary circulation.

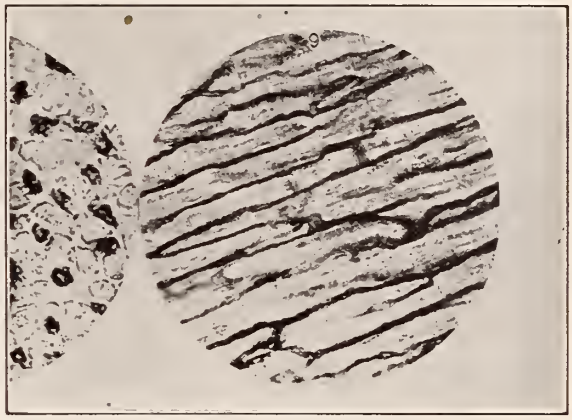


Fig. 1 (From J. T. Wearn)

I wish to report nine cases, one in full, and the electro-cardiographs of eight others, who survived their initial attack from 5 months to 5 years.

SYMPTOMS OF CORONARY OCCLUSION

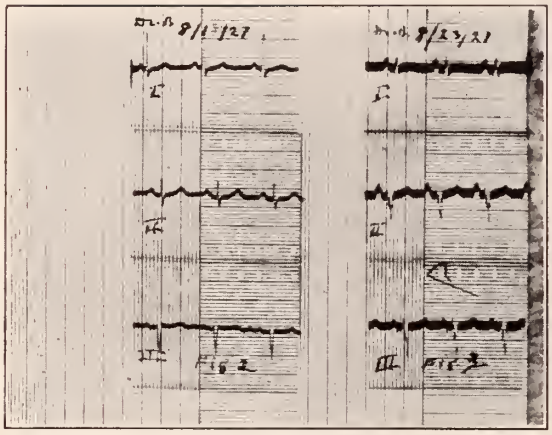
SUBJECTIVE	OBJECTIVE
Often history of preceeding attacks of true angina pectoris with negative E.K.G. and nitrite relief.	Over 55.
	Individual of great activity
	Patient in shock.
	Cold clammy forehead and extremities.
Terrible agonizing pain in precordium radiating down left arm.	Irregular rapid pulse.
	Change in heart tones.
	Murmurs, later pericardial friction rub.
No relief on nitrites or morphine.	Fever.
	Slight leukocytosis.
	Low blood pressure.
Fear of impending death.	Pulmonary signs.
	Changes in E.K.G.
Vice-like choking feeling.	

CASE REPORTS

I know of no better way to describe the classical clinical picture of coronary thrombosis than by the following case report.

CASE 1. J. A. L. B.—physician—age 70 years, was first seen Feb. 11, 1927. He had always been of nervous temperament, a very active man and a great hunter. Five months before we saw him

*Presented before 87th Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, Sept., 1928.



Figures 2 and 3

he had experienced his first precordial pain while hunting in the Rocky Mountains. The morning of Feb. 11th, while walking to the hospital, he experienced another attack of vice-like precordial pain radiating down the left arm, associated with smothering. Amyl nitrite gave no relief but morphine did. In the next two weeks he suffered three more mild attacks, well controlled by amyl nitrite.

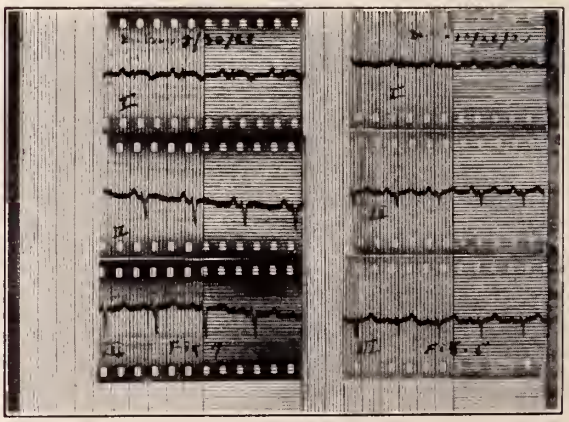
Six months later, after an interval of activity without pain, he again began to experience precordial distress at his golf. On the morning of Aug. 18, 1927, he had another severe attack after walking a mile. Amyl nitrite gave relief, as it also had three previous nights at his home for mild attacks. Physical examination at this time showed a broad-chested, hyposthenic, evidently hardy old gentleman, not cyanotic but slightly dyspnoeic, in considerable pain. The pulse was regular, rate 80, blood pressure 120 systolic, 90 diastolic. The heart sounds were normal, and the heart was slightly enlarged in the teleoroentgenogram, of the transverse type with broad aorta. The electrocardiogram (Fig. 2) was normal except for left ventricular predominance. He was seen in consultation that morning with an eminent cardiologist of a neighboring city and given a good prognosis on the basis of these findings if he would only rest, a thing he would not do before.

However, that very night I was called in great alarm by his wife to find the patient tossing about on his couch in extreme agony from pain in his chest and left arm, dyspnoeic, ashen gray, with cold clammy extremities and brow. He had himself inhaled three ampules of amyl nitrite without relief and begged me for morphine. A fourth of a grain of the latter helped him none, nor did one-fiftieth of a grain of nitro-glycerine. Two more injections of one-sixth of a grain each of morphine during the night gave no rest from pain. The heart was irregular with many extra systoles, the rate 120. There was a protodiastolic gallop rhythm at the apex and weakening of the heart sounds over those heard earlier in the day. A systolic apical murmur was now heard for the first time. The temperature was 99^{6}°. Within twenty-four hours he developed a pericardial friction rub. The pain persisted with varying intensity for one week. During that time he developed dullness at the left base, coarse and crepitant rales, bronchial breath sounds, and pectoriloquy. The white blood count was 10,600, blood pressure was 100/70, and the temperature 100°-102°.

Four days after his infarction the electrocardiogram showed for the first time pathological changes. (Fig. 3). QRS_1 was of much smaller voltage than before infarction and T_1 was flat. QRS_2 was now downward. Rate 120.

Twelve days later, Aug. 30, 1927, after the patient was feeling perfectly well again, the electrocardiogram (Fig. 4) showed further changes. $QRS_{1,2,3}$ notched, S-T_1 is above the iso-electric line, convex upward, and T_1 deflected downward (Pardee's phenomenon). The voltage is still low in Lead 1. Rate 111.

On Oct. 26, 1927, the patient was seen again. He had been hunting and motoring, and had helped push his car out of the mud in Montana with only some cardiac asthma that night as a result. He had even on another occasion turned over in an automobile wreck and played eighteen holes of golf without ill results. He was slightly short of breath on the hilly holes. The electrocardiogram (Fig. 5) allowing for 2 mv. less dif-



Figures 4 and 5

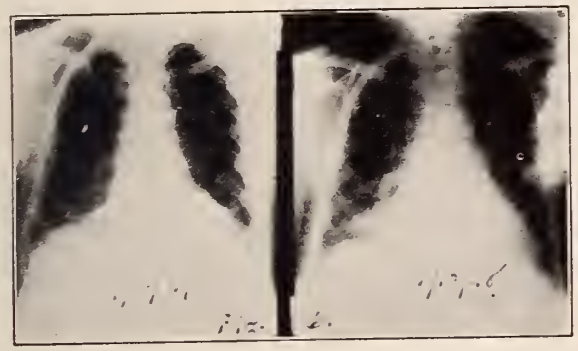


Fig. 6

ference in standardization was the same as two months before. The rate was 144. His blood pressure was 120 systolic, 80 diastolic.

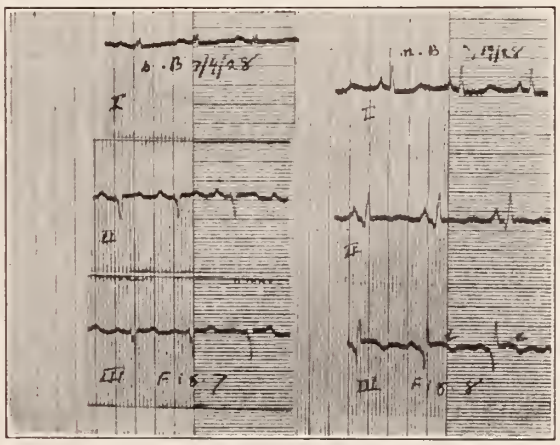
A year after his infarction he was seen again. He had been working actively, playing golf, fishing and hunting with only minor dyspnoea. He still experienced rare attacks of slight precordial discomfort. He had survived well one attack of acute cholecystitis (confirmed by gall bladder visualization) and a severe grippe infection with fever of 104°. The last month, however, he was slightly more short of breath, his feet swelled slightly, and he himself had noted albuminuria. The pulse rate continued between 90 and 100 on slight exertion. He now appeared slightly haggard. The blood pressure continued good, 120 systolic, 80 diastolic. The peripheral arteries were soft. There was now present slight pitting oedema of the ankles, and for the first time since the night of infarction a soft blowing apical systolic murmur transmitted into the left axilla. The diagnosis of gradual myocardial degeneration with relative relaxation of the mitral ring is confirmed by the teleoroentgenogram which shows an increase in the size of the heart (Fig. 6). The electrocardiogram (Fig. 7) shows more definite notching of the ventricular complex in all leads, a flat or slightly negative T_1 and about the same voltage. Pardee's phenomenon has disappeared.

DISCUSSION

Undoubtedly an infarction took place one year ago in this patient's coronary system. He presented the typical clinical picture followed by the classical sequellae, pericardial friction rub, congestion at the base of the lung, and electrocardiographic changes demonstrated in contrast to a normal tracing taken the morning before infarction occurred. That the occlusion took place at an unusual point, perhaps some branch of the right coronary instead of the anterior descending branch of the left coronary, is suggested by the change in form of the electrocardiogram, the R in Lead 1 being so reduced in voltage and the R_2 now being directed downward, indicating a greater predominance of the left ventricle.

Pardee[8] has called attention to a fairly characteristic electrocardiographic sign illustrated in some of these curves. The S-T takes off the R wave in one or perhaps two of the leads above the iso-electric point and is convex upward to curve downward into a negative T wave. When found, this sign is very suggestive but does not occur in all cases. Wearn[9] concludes, "It is obvious there is no one form of the electrocardiogram characteristic of this condition". Only one out of ten cases reported by him had Pardee's typical sign. Clark and Smith[10] state, "No aleration of the T- waves in coronary thrombosis has been accepted by the many writers as characteristic. For clinical purposes this change consisting of elevation of the T wave which branches from the R or S limb may be considered as strong presumptive evidence of coronary occlusion". Fred M. Smith[11] shows the electrocardiogram of a dog with typical inversion of T_1 and T_2 with convexity of the S-T interval following ligation of the coronary arteries. Other changes that may occur and are suggestive are auricular fibrillation, arborization and bundle branch block. In our series of nine cases who survived occlusion there were seven cases showing varying degrees of Pardee's phenomenon, one of left bundle branch block, and one of notching of the QRS complexes in all leads.

The ultimate outcome in this case will probably be congestive failure. Angina pectoris is notably absent in congestive failure as shown by an-



Figures 7 and 8

other of our series who died two years after her occlusion with pulmonary oedema and general anasarca. She had repeated attacks of angina with Pardee's sign in the electrocardiogram (Fig. 8) until congestive failure set in. After that, she was free of pain till compensation was restored when precordial attacks of pain recurred. Finally a second and final period of decompensation brought relief from pain. Hamburger[4] indeed reported three cases who suffered but very little pain but who died of congestive myocardial failure based on coronary occlusion. In these cases the occlusion may be very gradual.

CONCLUSIONS

1. A case is reported in full, with electrocardiograms, who survived an attack of coronary occlusion nineteen months to date.

2. The electrocardiogram offers substantial corroborative evidence of coronary occlusion, and of the changes found Pardee's sign is the most suggestive.

3. Pardee's phenomenon may not be present the first few days but usually appears within two weeks time.

4. Many cases survive minor occlusions, and rare cases extensive infarcts.

5. Death may occur in these cases months later by congestive myocardial failure with or without further attacks of precordial pain.

6. We have in our files eight other cases who have survived coronary infarction eight months to five years and two months.

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For discussion see page 53.

Heart Disease; Some Economic Phases*

By MALCOLM F. ROGERS, M. D.
Milwaukee

In recent years heart disease has become the leading cause of death. The national death rate from diseases of the circulatory system in the year 1925 was 185.5 per 100,000. That of the state of Wisconsin for 1926 was 168.3 per 100,000. During 1927, 23.66% of all deaths occurring to policy holders of the Northwestern Mutual Life Ins. Co., were due to diseases of the circulatory system.

Circulatory disease in its various manifestations ranks first in order of causes of death and I am inclined to believe that it is also first in the amount of damage it does through disability and invalidism. The annual quota of deaths in the United States due to this cause was 200,000 in 1924-25. If present conditions continue, one in every five of the population now living, at the age of ten years will eventually succumb to organic heart disease. A child at 10 years of age is now three times as likely to die from heart disease as from tuberculosis. At 35 the probability of dying from heart disease is from 4 to 6 times that for tuberculosis.[1]

Heart disease has become a matter of great public interest since it was pointed out some years ago that the death rate from this cause was rising. The fall in infectious diseases preserves the population for exposure to death from the more chronic, or from the view point of the aging process, the more natural death. How heart disease increased from 1900 to 1920, how the rate from pulmonary tuberculosis fell; how the rate from pneumonia has not reached that of heart disease since 1910 and how cancer is constantly mounting, but even now, relatively speaking, is a small problem numerically compared to heart disease is well known. The fall in infectious diseases, is inti-

*Presented before 87th Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, Sept., 1928.
[1]L. I. Dublin, Statistician for Metropolitan Life Insurance Company.

mately associated with the rise in the cardiac death rate.

From a consideration of all morbidity figures, it appears that roughly 2% of the adult population of the United States have organic heart disease. In other words, there are approximately 2,000,000 men, women, and children in our country with organic heart disease. Of the total deaths from circulatory disease 1/6 occur before and 5/6 after the age of 40. The death rate below the age of 40 has fallen. It should not be forgotten that deaths of middle aged men and women in most instances involve a loss of many years of productive life and often years of diminished efficiency and even complete invalidism prior to death. Death at these ages frequently produces broken families and orphaned children thrown upon the community for support. Furthermore it should be remembered that heart disease very often starts in childhood, developing slowly and reaching its climax in the most productive years of life.

I cannot refrain from quoting some conclusions by Dr. Haven Emerson, who has studied the question of heart disease in New York.

"Heart disease reduces the life span of its victims by one-half.

"Heart disease in a recognizable form interferes with work, play or comfort of at least 2,000,000 people in this country today.

"At least fifteen of every thousand school children have already acquired some definite disorder of the heart.

"At least thirty of every thousand men and women of working age must reckon with heart disease as a disability in work or a handicap in their pleasures.

"Twenty-five per cent of all visits to New York City dispensaries are made by heart patients.

"Of all serious and ultimately fatal diseases, those of the heart are of the longest duration, and with the possible exception of certain diseases of the mind, they cause the most persistent chronic handicap to self-support.

"With two million people in the United States handicapped by heart disease, it is estimated that production is impaired to an extent of $10,000,000."

A survey of heart patients in ten New York general hospitals, and in convalescent homes, dispensaries, etc., indicates that the basic minimum cost of adequate care for persons with heart disease is at least fifty cents per year for each member of the whole community. This estimate does not take into account the losses in industry for intermittent, or part time work which such handicapped persons may accomplish, or the cost of relief of families of the indigent or dependent group.

In the New York study it was found that 10 percent of the beds of general hospitals were occupied day in and day out by heart patients. The cost of hospital care for the acute stage of heart disease is at least $70 per patient on each admission, and for convalescent or chronic care, not in general hospitals, each patient costs from $150 to $650 according to the length of stay permitted.

It is instructive to realize that in New York City during 1920-21 considerably more than half a million dollars was spent to care for some 4,500 cardiac patients in hospitals; while the cost of supervising nearly 6,000 ambulatory heart patients in clinics was less than one twenty-fifth of the hospital cost. What more convincing argument could be presented of the economy which can be effected when disorders of the heart are prevented, or at worst diagnosed and treated in their incipient stages!

To provide wholly adequate dispensary organizations for heart patients, including the services of physician, visiting nurse and social worker, it is estimated that $20 per patient per year will be needed if there are at least 200 patients on the active list. By such an investment of $20 a year it is often possible to enable the head of a family to remain at work, supporting his dependents; to enable the mother of a family to remain in the home, avoiding institutional care for her and for the children, returning the investment many times over by savings in relief or in hospital care which otherwise would be unavoidable.

Consider these statements and you will grant that heart disease is an outstanding problem of contemporary medicine. If heart disease were eradicated as a cause of death, it is estimated that everybody would have about two years added to his life expectancy—not a small matter when the economic value of a year of life is considered.

GROUPS ENGAGED IN PREVENTION AND RELIEF OF HEART DISEASE

In the last few years many organizations have been formed for the purpose of carrying on the campaign of education regarding heart disease. The American Heart Association was first, later other local units were organized. The union of state tuberculosis work and heart work is spread-

ing and the two will be more closely connected as time goes on. There is promise that when the same methods which have been so successful in reducing the incidence and death rate from tuberculosis are applied to heart disease that a reduction in the latter will follow.

In Wisconsin we have no convalescent homes for cardiac cases and only two listed cardiac clinics, both in Milwaukee. The necessity for more cardiac clinics and especially for cardiac convalescent homes is evident. Were the latter available the convalescent case would be treated better and at less expense than is now possible. Our own W. A. T. A. last year undertook a study of heart disease along with tuberculosis. This work now is being carried on and we may look for success commensurate with the co-operation which is offered by our practicing physicians. Similar cardiac studies by groups here-to-fore engaged exclusively in tubercular work are now to be found in New York, Iowa and California.

What can bé done to reduce this tremendous economic loss to the patient, the patient's family, the county, the charity hospitals, infirmaries and the privately supported social agencies who are constantly contributing to the support of these patients and their families?

CONTROL OF DISEASES RESPONSIBLE FOR HEART DISEASE

Diseases of the heart may be classified etiologically under three main groups viz:

1. Those associated with rheumatic fever (including "growing pains"), chorea, tonsillitis and influenza.
2. Those due to syphilis.
3. Those cases occurring with arterio sclerosis.

Rheumatic fever affects persons primarily in the first three decades. To eradicate rheumatism and chorea means prevention of the majority of heart disease in children and young adults. Experiences on the subject of treatment reveal that apparently, from a remedial point of view, success can be anticipated from the use of methods designed to close sources of infection. The suggestion that heart patients be treated as are those with tuberculosis—by continuous prolonged rest, deserves consideration. I believe that all too often the patient with acute rheumatic fever or chorea, with or without demonstrable heart impairment, is allowed up and around long before it is warranted. The medical profession must educate itself, and the public, to the dire necessity of prolonged continuous rest following an attack of rheumatic fever, tonsillitis or chorea. Far too often the patient has been allowed freedom of exercise before that period of maximum cardiac hypertrophy has developed which is going to be the mainstay of protection in after life. The physician must realize that his duties are not concluded when the acute local manifestations of rheumatism or chorea have disappeared, and that often times the evidence of cardiac injury is late in appearing.

Syphilitic heart disease is rare before the third decade and is often delayed two decades more The original syphilitic infection demands early appropriate and later continued intensive treatment if the late cardio-vascular manifestations are to be avoided. A careful control of hygiene, habits, diet, work, play and infections will, more than anything else, avoid the onset of the arterio-sclerotic process which so frequently causes circulatory disease in later life.

HOSPITALS AND CONVALESCENT HOMES

Public provision of at least two sorts is requisite: (1) the hospital for what may be called the more acute or urgent phases of these diseases. In the case of rheumatic fever, during the period of active infection and in the case of already established chronic cardiac disease in the period when heart failure first appears. (2) Later for both types of cases further provision is desirable. When the course of the disease is less stormy and while rehabilitation to a new level of activity is being accomplished and a new way of life is learned, the convalescent home is indispensable. Failure to provide these two kinds of organized care probably shortens the useful period of life and also causes an earlier death from heart disease.

VOCATIONAL TRAINING AND EMPLOYMENT

I must not omit mentioning the necessity for vocational training for the cardiac case. Cardiac children and their parents should be made to realize the importance of trade schools which give such training as will enable these children to enter the skilled or semi-skilled occupations which do not require a maximum of physical exertion. It is easy to see that such work as running errands, packing, doing heavy factory work or ordinary day labor is unsuitable for these patients. The trades in general, supply the opportunity for earning a better wage and for engaging in work much less arduous than is found in the field of unskilled labor. The aim of vocational training for the individual with heart disease is to provide an occu-

pation which is within the limit of his physical and mental capacity.

Co-operation from the employer is essential to make this plan work successfully. To a certain extent the prevalent idea that a cardiac is a candidate for sudden death has operated against his employment. A more effective reason is, however, the fact that our state law does not permit a prospective employee to sign a waiver of liability on the part of the employer for disabilities which may arise from the existent cardiac disease. The employer must accept the employee with the full responsibility imposed by the law. This fact makes the employer cautious and timid about accepting an individual with a known heart impairment, any later developments of which are apt to be attributed to his work. The next step in our campaign to provide employment for the cardiac is to secure modification of our laws regarding the validity of waivers.

The movement against heart disease is not a mere medical fad which will soon die out, but an effort which must be forwarded by the medical profession and laymen alike if disability and mortality are to be reduced. That they can be reduced is without doubt if many work to that end, and if those with special skill or financial means lend their aid. It will take persistence and money, but when the public once realizes the nature and extent of the need, neither will be lacking.

DISCUSSION

DR. L. M. WARFIELD (Milwaukee): Mr. President, Members of the Society, and Guests: I think your President has said rightly that heart disease is one, if not the most important of the subjects before the medical profession today.

It is interesting to see the gradual increase of deaths from heart disease in the last few years, as compared with those diseases that we have heretofore thought were what Osler called captains of the men of death, particularly pneumonia.

In discussing this symposium this morning, I shall take up the individual papers, and say a few words in amplification probably and also give more or less of a rounded character, if it can possibly be done, to the discussion of the papers that have heretofore or just previously been read.

I was very glad to hear Dr. Middleton take up the subject from the standpoint of the recent advances in bacteriology of heart disease, not just a study of the various micro-organisms which may be responsible for the disease, but more particularly the work Swift has developed on the question of allergic element in rheumatic fever.

Recently, of course, Small has discovered an organism which he thinks is responsible for rheumatic fever and rheumatic heart disease. However, it is a question whether Small's organism varies very much from the one discovered by Poynton and Payne some years ago, and further, it is a question whether the organism discovered by Small is really a specific organism, because Zinser and his group at Harvard have conclusively shown that there are varieties of streptococci which may produce all the lesions of the rheumatic fever and of rheumatic heart disease. They differ from each other so little that it is only a question of the possible fermentation reactions of these organisms on such a peculiar carbohydrate as inulin. Of course, agglutination occurs, so that it is practically impossible for us to say, I think, that any one organism is responsible for the disease rheumatic fever and with its accompanying cardiac complications.

Dr. Swift has called attention, too, to another matter which Dr. Middleton suggested but did not amplify very much—the very strange and striking relationship between rheumatic fever, tuberculosis, and syphilis. Each one of these three processes are allergic phenomena.

I think we should look upon rheumatic fever as a disease somewhat similar to tuberculosis; a disease which has a chronicity about it; in which an organism is in the body, producing some allergic phenomena, and in which occasionally exudative processes take place, lasting over a fairly long period of time; where the joint manifestations are, after all, the very least of the manifestations representing only the allergic responses, the exudative responses such as are found in all such phenomena. The real disease, after all, is the disease of the heart, either the valves or the myocardium, or the pericardium. I think it will be helpful if we look upon it from this standpoint, because, as Dr. Rogers has remarked, the value of prolonged rest in these cases will make us a little more careful about getting our patients up too soon after the allergic phenomena of exudation has ceased in the case of acute rheumatic fever.

Recent work, too, has shown the peculiar vascularity of the valves. We did not know much about blood vessels in the valves of the heart until within comparatively recent years, and the reason why rheumatic virus shows a predilection for the mitral valve, as a rule, is probably to be explained by the peculiar vascularity of the mitral valve, the process coming not from the heart to the valve but from the blood vessels in the valve, there being the usual exudation in an allergic individual and nodules forming with the continual rubbing of valves.

Probably the reason why children are so much more prone to these lesions than are adults is because of the fact that in children the valves are very much more vascular than they are in adult life.

Now it is a strange thing that in a disease like subacute bacterial endocarditis we are dealing with a condition where there is a high degree of bactericidal. It really is a paradox. The bacterititer power of the blood in subacute endocarditis is great. Immune bodies can be shown to be present in the blood. Yet, in spite of that, the individual goes on almost invariably to a fatal termination.

Another interesting thing about subacute endocarditis is the fact that it is rarely,—I think one might say never, a disease which is implanted upon a normal valve.

It is always a disease implanted upon a previously distorted valve, the disorganization being either that due to previous endocarditis or the distortion due to congenital defects of the valve. So that when we see cases of subacute bacterial endocarditis where there has been absolutely no history of previous endocarditis we cannot say that disease was implanted upon a normal valve until we have carefully examined the heart postmortem.

I think it was Lewis, among others, who showed that the most careful dissection was necessary to show that at times there was but slight noticeable deviation from the normal in the valves due to congenital defects. I was sorry that Dr. Hodges did not say more about the value of the x-ray in cardiac diagnosis, confining himself, as he did simply to cardiac measurements naturally limited him. But I think he could have stretched the point a little bit and given us possibly a little more in detail about the tremendous value of the x-ray in the diagnosis of heart disease.

To my mind, the x-ray is probably the most valuable of all the methods that we have at the present time, as a help in the diagnosis of heart disease. Not only is it helpful in the diagnosis of the size of the heart, which, of course, is of exceeding importance, but it is also of great assistance in the diagnosing of the type of valvular lesion that the individual has.

We all recognize how difficult it is sometimes to tell the case of mitral stenosis. If, however, we know about the change in the shape of the heart, as the result of the mechanical factors which do result from mitral stenosis, it is not so very difficult for one who is familiar with the picture to confirm the diagnosis of mitral stenosis by means of the fluoroscope. Diagnosis, of course, is always important for prognosis, and when one knows the character of the lesion, one can follow the changes in the size and the shape of the heart. One, then, has an opportunity of predicting much more closely what is going to happen to that individual. So that the x-ray is not only of immense value in the measurement of the heart, but also of immense value in the determination of the type of lesion which is in the heart.

Dr. Hodges called attention to the age, weight, height, transverse diameter formula, but it seems to me that while that is simple enough it requires a certain amount of calculation. I believe the recent work of Eyster, in which he has checked up these various formulae with the girth of the thorax, transverse diameter of the heart ratio, so closely approximates the other that one can use that as the index of cardiac measurement.

I think Dr. Hodges is perfectly correct when he says the orthodiascope is very much more valuable than the teleoroentgenogram. It does require a certain amount of skill and a certain amount of practice. It does not seem to me it is altogether necessary to have any extra apparatus on the fluoroscope. It is a matter of experience and practice and enables one to trace either upon the glass of the screen itself or upon a piece of celluloid put over the glass, the actual silhouette of the heart. From that one can then measure the transverse diameter, the right side and the left side added together.

This question was brought up in this Society, I am sure, once, because I recall three years ago we had a session on the question of heart measurement. At that time I showed some slides, and I do not remember whether it was Dr. Hodges or one of the other of the Madison group who also supplemented the work by showing at the same time some heart measurements.

I think Dr. Evans' paper should have a change in the title. It was called coronary sclerosis. Just for the sake of accuracy, coronary sclerosis and coronary occlusion are not the same thing. He spoke, of course, about coronary occlusion. There is no doubt about the fact that coronary occlusion today is one of the most important heart conditions that we see. Dr. Evans' outline of the symptoms are so characteristic it is not at all necessary to go into that. I simply want to call attention to two or three important points that seem to me should be discussed.

One is that coronary occlusion can occur without any pain whatsoever. An individual who suddenly shows heart failure without any evidence of valvular disease; the blood pressure suddenly drops from a known figure, 20, 30, or 40 points in the systolic pressure, and a slight amount in the diastolic, who has symptoms of cardiac failure, has very probably been the victim of a coronary occlusion which has developed without any pain whatsoever.

There is just one more point which I think it is well to bear in mind. That is there can be cardiac failure with perfectly normal pulse rate, below 100. I think if we recognize the fact that such can occur we will be able to treat our patients a little better, because we will know, in spite of the fact that the heart apparently is working all right, the symptoms of decompensation being present, that the heart is failing, and then can institute measures which are those of well recognized treatment for cardiac failure. (Applause.)

Hyperthyroidism and Glycosuria; Relationship*

By ALBERT W. BRYAN, M. D.
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In a review of the subject of the relationship existing between hyperthyroidism and glycosuria, Fitz found that the earliest report of the association of these conditions was made by Dumontpallier in 1867. Brunton, in 1874, reported the earliest English case, and Hartman of the Tubingen Clinic, reported a case in 1878. The earliest American case was reported by Manges of New York in 1899. These early writers stressed the association between two uncommon conditions without attempt to note a possible relationship. In 1906 von Müller observed a possible interrelationship of these conditions; his impressions were based on the observations of a woman with chronic

*Presented before 87th Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, Sept., 1928.

Table 1
Incidence of combined diabetes and thyroid dyscrasia in Jackson Clinic

Year	Toxic adenoma		Nontoxic adenoma		Exophthalmic goiter		Diabetes	
	Thyroid	Glycosuria	Thyroid	Glycosuria	Thyroid	Glycosuria	Thyroid	Glycosuria
1923	33	2	117		41	1	3	26
1924	58	2	204	3	47		5	25
1925	64		237	3	81	1	4	28
1926	43	1	234	4*	98	2	6	23
1927	46	3	190		94		4	18
Total	244	8	982	10	361	4	22	120
Percentage		3.2		1.0		1.1		18.2

goiter who had developed diabetes; sometime later this patient's goiter disappeared spontaneously and she was able to take considerable amounts of glucose without symptoms of glycosuria.

Fitz reported thirty-nine cases; he excluded a number of cases of thyroid disease complicated by mild glycosuria, since the relationship of transitory glycosuria in thyroid diseases and diabetes was not established. Fitz reviewed from the literature a total of about ninety cases of glycosuria existing among more than 2,500 cases of hyperthyroidism. At the time of his report there was no established evidence that such association was more than coincidental; he noted that diabetes usually follows, but may precede, disturbances of the thyroid gland and tends to parallel the severity of the thyroid intoxication. It was Fitz's opinion that patients with diabetes and a toxic thyroid gland tended to improve after the thyroid symptoms were checked because a portion of the thyroid is made functionless.

CLINICAL AND PHYSIO-PATHOLOGICAL CONSIDERATIONS

Wilder sometime later reviewed thirty-eight cases of frank diabetes combined with hyperthyroidism and one case of diabetes associated with myxedema. He found 1.1 per cent of all cases of hyperthyroidism to be associated with diabetes; he noted exophthalmic goiter to be less frequently complicated by diabetes (0.6 per cent of all cases). It is significant that neither Fitz nor Wilder noticed any effect of nontoxic goiter on the course of diabetes. Regarding the recognition of mild hyperthyroidism complicating diabetes, Wilder observed that since the metabolism in well-managed cases of diabetes is somewhat below the level called normal for well-nourished persons, a basal metabolic rate of plus 10 or plus 15 per cent, which would be considered within the normal range for well-nourished persons, may represent in the undernourished person with diabetes a definite stimulation from hyperthyroidism. In Joslin's series the average basal metabolic rate in cases of primary hyperthyroidism was +61 per cent. Since this was comparable to an average rate of +49 per cent in other cases of primary hyperthyroidism, he concluded that the presence of diabetes tended to elevate the basal rate.

Wilder also noted that iodin administered to patients suffering from combined exophthalmic goiter and diabetes reduces the intensity of diabetes; however, iodin was found to be without effect in the course of diabetes when it was associated with adenomatous goiter with hyperthyroidism, and it was without effect in cases of uncomplicated diabetes. Thyroidectomy he noted to be almost always followed by a considerable gain in glucose tolerance. A case of myxedema associated with diabetes was cited by Wilder to illustrate the palliative effect of lower metabolic rates occurring in diabetes, glucose being utilized with less insulin than is required when the metabolism is pitched at a higher level. In this case, when the basal metabolic rate was restored to normal the previous diabetic state returned. Wilder felt that the phenomenon exhibited by patients with diabetes combined with states of hyperthyroidism may be related to the general metabolic rate and thus explained without recourse to speculation as to a specific interdependence of thyroid and pancreas.

John pointed out that the presence of glycosuria alone is not proof of the existence of the diabetic state; however, it indicates the need of further investigation. John also emphasized the fact that in some cases of hyperthyroidism the renal permeability is increased. He found that the excretion of sugar during the acute stage of the disease was much larger than that after thyroidectomy, although the coincident blood sugar curves were identical. As John viewed the sub-

*One case of thyroiditis included.

ject and studied the carbohydrate metabolism in these cases, he was led to regard hyperthyroidism as an influence in the development of diabetes. This does not mean that the tendency for diabetes to occur is directly in proportion to the intensity of the hyperthyroidism, for quite evidently, in a given case of severe hyperthyroidism, the glucose tolerance may be quite normal while in another case of mild hyperthyroidism there may be frank diabetes. It seems rather that hyperthyroidism is simply a factor which is sufficient to precipitate the onset of diabetes in persons in whom diabetes is already developing, especially if this factor is associated with other factors such as overeating and infection. It is well known that patients with hyperthyroidism consume large amounts of food to compensate for the increased metabolism and this throws a heavy burden on the insulogenic function of the islands of Langerhans, which if already weakened easily become exhausted and diabetes results.

A more recent and exhaustive article by John only lends further support to this hypothesis. In this type of case he notes that there are two factors which indicate a shortage of insulin, (1) abnormal hyperglycemia, and (2) glycogen-free or glycogen-poor liver in which storage of added glucose is prevented. Since insulin is necessary to the storage of glucose and since this is present in inadequate amounts in this type of case, it is not difficult to understand that in patients with hyperthyroidism in which the carbohydrate supply is readily exhausted the liver would be poor in glycogen. He feels that such patients are greatly improved after proper treatment of the thyroid, but as a rule their response to glucose tolerance tests is not entirely normal. The response would of course be normal if the thyroid toxicity were solely responsible but since the curves do not entirely return to normal it appears that the changes in the islands of Langerhans are permanent. This is what one would expect if, as we believe, the hyperthyroidism is only an aggravating factor, the true site of the diabetes being of course in the pancreas.

Joslin also has recently made an exhaustive review of the literature on this subject as well as his own cases. He is convinced that hyperthyroidism and disturbance of sugar metabolism and even diabetes are distinctly related; thus in 38.6 per cent of his cases with primary hyperthyroidism and in 27.7 per cent of his cases with secondary

TABLE 1A

Disease	Cases	Per cent
Goiter	1707	
Diabetes	22	1.2
Exophthalmic goiter and toxic adenoma	605	
Diabetes	12	1.9
Diabetes	120	
Thyroid	22	18.2
Exophthalmic goiter	4	3.3
Nontoxic adenoma	10	8.3
Toxic adenoma	8	6.6

hyperthyroidism there was glycosuria and diabetes present in 2.5 per cent of the former and 4.3 per cent of the latter. True diabetes in the presence of hyperthyroidism, he defines as a condition with fasting blood sugar of 0.15 per cent, or 0.20 per cent after meals, in addition to glycosuria.

By experimental work (Burn and Marks) and (Bodansky), it has been shown that through glycogen storage in the liver there is an important relationship between the thyroid and pancreas. If glucose is given intravenously to a rabbit, glycosuria appears which gradually disappears. If the glucose injections are continued and the animal fed daily with thyroid gland the fall from the primary hyperglycemia is broken by a secondary rise which eventually falls to a level of hypoglycemia. Ultimately, if the daily injections of glucose and the thyroid feeding are continued, convulsions and death ensue, as there is no more hepatic glycogen to be discharged. The secondary rise in blood sugar following glucose injections in animals fed on thyroid gland apparently is due to conversion of glycogen in the liver into sugar which is discharged from that organ. In normal animals thyroidectomy increases the tolerance for carbohydrates and leads to hypoglycemia, whereas feeding thyroid to normal animals lowers the assimilation of glucose and decreases the quality of glycogen stored in the liver. After thyroidectomy, hypoglycemic convulsions may be induced with one-third, one-fifth, or one-sixth, the dose necessary for this reaction preoperatively, since thyroidectomy prevents the conversion of glycogen into sugar and its discharge from the liver. Consequently less insulin is required to reduce the sugar in the blood and convulsions result; a similar result may be obtained by severing the splanchnics. If thyroid is fed, insulin acts less well. If, however, thyroid feeding is continued for more than ten days the reserve of glycogen in the liver becomes exhausted. Should insulin be injected at

this time, convulsions are produced with less than the usual dose of insulin. It would appear then that there is antagonism between the thyroid and pancreas in relation to carbohydrate metabolism, the insulin being subservient to the thyroid so long as there is glycogen stored in the liver.

Pathologically (Holst, citing Pettavel) it seems that in cases of Basedow's disease degenerative changes of the islands of Langerhans have been noted.

Joslin has never noticed diabetes in consequence of exercise, which tends to produce a hypoglycemia, nor in fever, even in typhoid with forced carbohydrate feeding, where there is an abnormal increase in metabolism. He feels that the hyperthyroidism alone is the factor in disease of the thyroid which leads to glycosuria. In comparing the patients with diabetes and hyperthyroidism he notes in each a loss of weight, red cheeks, a high metabolism, with increased pulse rate, and weakness resulting from a high caloric intake. If both are properly treated a lower metabolism results in the one from altered diet and insulin to an under functioning pancreas, in the other from surgical removal of a portion of an over functioning thyroid.

JACKSON CLINIC EXPERIENCE

My interest in this subject dates to the summer of 1927 when the case to be described later came to my attention. It seemed to me that this subject was of such interest and practical importance that the compilation of statistics from another source would not be superfluous.

A review of the cases of hyperthyroidism and glycosuria seen in the Jackson Clinic from 1923 to 1927 inclusive (Table 1) indicates that the percentage of diabetes in the entire series of thyroid dyscrasias is rather small (1.2 per cent) or (1.9 per cent of patients with some evidence of toxicity). This figure is a little higher than that of Wilder (1.1 per cent) and a little lower than that of Joslin (3.15 per cent).

On the other hand, the incidence of thyroid dyscrasia in patients with diabetes is rather high (18.2 per cent of the entire group), the diabetes in 10.7 per cent of the patients being associated with hyperthyroidism in some degree. Further consideration leads me to feel, considering also the experience of others, that the toxicity and the strain on the mechanism of metabolism imposed by the hyperthyroidism must make this an important factor in the etiology of diabetes; it is perhaps of much more importance than is commonly thought. Conversely, it is not shown that diabetes by itself plays any particular part in the development of hyperthyroidism.

In this series, although it was difficult, on the basis of the date available, to be definite, it appeared that in at least fifteen of the twenty-two cases thyroid enlargement had been noted for considerable periods before glycosuria was discovered. In four other cases in which the condition was more acute it was difficult to say which preceded. In twenty of the twenty-two cases the diabetes was of sufficient severity to require careful dietetic management; however, in eight of these there was nontoxic adenoma in which the factor of thyroid intoxication was essentially negligible from the standpoint of diabetes.

On the basis of this review the highest percentage of diabetes occurs in association with toxic adenoma. In this group, adenoma has been present for a considerable time, glycosuria as a rule for a shorter time; also toxic adenoma tends to occur in patients of a more advanced age than those with exophthalmic or nontoxic goiter and in these, other factors such as sclerosis, obesity, and chronic infection, which seem to be important in the etiology of diabetes, are also most often to be noted.

The percentage is smaller in the group with exophthalmic goiter, in which the hyperthyroidism and metabolic load are greater than in the group with toxic adenoma. In these persons also, the pancreatic strain induced by hyperthyroidism, although of greater severity, is usually active for a shorter time because exophthalmic goiter is usually more acute than toxic adenoma. This situation is probably best explained on the basis of the more frequent occurrence of the exophthalmic syndrome in younger persons in which there is greater pancreatic, and accordingly greater insulogenic reserve, more native resistance to infection, and smaller likelihood of obesity.

Table 2 is a summary of a typical case of diabetes which occurred in the presence of toxic adenoma with notable postoperative reduction in the amount of glycosuria. Only traces of sugar appeared on qualitative diet restriction ten months after thyroidectomy.

TREATMENT

The treatment of diabetes associated with hyperthyroidism does not vary from the treatment of diabetes without this complication except that

a diet of much higher caloric value than the usual diabetic diet is necessary, because of the increased metabolism in cases of severe hyperthyroidism. For this reason, as well as for the fact shown above that insulin is less efficient in the presence of hyperthyroidism, considerably more insulin would be required than in the uncomplicated case of diabetes.

Joslin makes no serious attempt preoperatively to make the diet sugar free. He gives about 100 gm. of carbohydrate keeping the protein at 1 gm. and the calories at 30 per kilogram of body weight. Insulin is started in small amounts, for instance five units three times a day. If satisfactory results are not forthcoming he may increase the amount of insulin and also the frequency of its administration. Great pains are exerted to give food within three hours of the operation—perhaps 20 gm. as oatmeal, orange juice or ginger ale; it is preferred that the preoperative dose of insulin be too small rather than too large. Postoperatively, it is desirable to give as much as possible of the carbohydrate in the original diet. Joslin and Lahey seldom increased the frequency and dose of the insulin since they found that sudden increase in glycosuria after operation was usually temporary and not attended by much harm. The quantity of iodine (Lugol's solution) given daily before operation was M 10 three times a day for eight or ten days, then M 20 three times the day before operation. Lugol's solution M 10 three times daily probably should be given during the postoperative stay in the hospital. In patients with postoperative reactions or whose preoperative course suggests

Table 2

Trend of glycosuria in patient with hyperthyroidism

Date 1927	Pulse rate	Blood pressure		Weight, pounds	Basal metabolic rate	Temperature, degrees F.	Diet					Insulin, units	Natural tolerance	Blood sugar, per cent	Glucose in urine, gm.	Acetone	Remarks
		Systolic	Diastolic				Carbohydrates, gm.	Proteins, gm.	Fats, gm.	Calories	Glucose available, gm.						
6/15	116	160	58	188										0.165	Grade 3	-	
6/18							100	50	100	1500	139				12	-	
6/21	80	170	74				100	50	100	1500		6 twice daily			11	+	
6/24																	Tonsillectomy
6/25	92	180	80				78	50	120	1592							
6/28												6 twice daily			6	+	
6/30				170	+27 per cent												
7/15	72	154	64				90	50	120	1640	131						
7/16												6 twice daily		0.160	Trace	Tr	
7/18												12				Tr	Thyroidectomy
7/19							80 liquids	12	10	458	88				29		
7/20						104.6	80 softliquid	19	46	810	103	18 in 3 doses	16		51		Extra-endogenous metabolism
7/21							168	33	93	1641	182	58 divided	46		24	-	Pneumonia
7/24						99.4	102	37	87	1339	131	12	95		12	Sl. tr	
7/25							122	40	110	1638	156	16 in 2 doses	116		8	Sl. tr	
7/30	84	140	76				100	50	125	1725	141	20 in 2 doses	101		-	-	
8/9	80	150	80				100	50	125	1725		18 in 2 doses			-	-	
8/10												18 at home					Dismissed from hospital
8/11				159	+3 per cent									0.117		-	
8/25												2 home			-	-	
9/9												2 home			-	-	
9/21							Qualitative carbohydrate restriction								-	-	

that a postoperative thyroid reaction is eminent, intravenous infusions of 50 grams of glucose with 750 cc. of normal saline solution may be given as indicated.

POSTOPERATIVE MORTALITY

In the Joslin-Lahey series thirty-seven of forty-three patients with primary hyperthyroidism were operated on with one fatality. Twenty-six of twenty-eight of their patients with secondary hyperthyroidism were operated on; there were two deaths. In our group of twelve patients with toxic thyroids, seven were operated on and there were no postoperative deaths.

SUMMARY

In this review the opinions of Fitz, Wilder, John and Joslin are well borne out, and the belief that hyperthyroidism is a factor in precipitating diabetes in a predisposed subject is amplified and extended, or as Joslin states, "the hyperthyroid patient on the basis of physiological, pathological, and statistical evidence is somewhat more prone to diabetes than the ordinary individual." The reverse, that is, that diabetes or glycosuria tend to aggravate the hyperthyroidism, does not seem to be the case. It was impossible in our series to distinguish accurately between mild glycosuria and frank diabetes. The glycosuria when present should be treated according to its severity, as a true diabetes, consideration being given to the increased metabolism when hyperthyroidism is present. Such treatment should be continued until the hyperthyroidism, or other contributory factors, are controlled to the point where the patient will remain without glycosuria on an adequately balanced ration.

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DISCUSSION

DR. K. H. DOEGE (Marshfield): Dr. Bryan has given us a very clear statement on the proper clinical evaluation of the presence of sugar in the urine occurring in cases of hyperthyroidism. I would like to emphasize a few of the points he has brought out. We must recognize that diabetes and hyperthyroidism do occur together, the hyperthyroidism usually preceding.

Thyroidectomy in such an individual will practically always be followed by a great improvement in the diabetes. A thyroidectomy in such an individual, done without a true recognition of the exact state of the C. H. O. metabolism may lead to a post-operative death that otherwise could have been avoided.

I believe that C. H. O. tolerance tests by blood sugar determination taken two and one-half hours after the ingestion of 100 grams of glucose, or a heavy C. H. O. meal, should be done on every toxic thyroid coming to operation regardless of the metabolic rate.

We must recognize the fact that following thyroidectomy there is a temporary increase in the metabolic rate lasting about four or five days. As a result there is an increased food requirement.

For diabetes we have a lowered COHO metabolism.

In hyperthyroidism we have an increased metabolin demand. If we have failed to recognize a coexistant diabetes or even just a lowered C. H. O. tolerance and do not give these patients sufficient calories, they will use up their body fat and an acidosis may occur with death.

These patients should be fed liberally up to the time of operation, taking into consideration the increase in metabolic rate, increasing the caloric allowance to compensate for the increased metabolism. Lugol's solution and insulin must be used as indicated. Let me repeat, it is imperative to investigate the sugar tolerance in hyperthyroidism.

TO THE COUNTRY DOCTOR

"Dear Doctor: A new angle of the "farm problem" which hasn't been discussed much but which will grow more and more acute with each passing year is pointed out by a writer in the current issue of the North American Review. It is the crisis in country life which is approaching as a result of the disappearance of the country doctor. In 1906 there were in the United States 33,000 physicians in towns of 1,000 population or less. By 1924 this number had dwindled to 27,000 and it is still going down. Almost one-third of the small towns that had resident doctors in 1914 have none today. Medical education and training grow more expensive each year. The vast majority of medical graduates, seeking to recoup their expenditures, enter urban practice as specialists in one branch or another of their profession. Just what can be done to remedy matters is not clear; obviously, it is a problem that needs some very serious consideration."—Capital Times, Madison.

Iron in Nutrition; A New Inorganic Factor as a Supplement to Iron in Hemoglobin Building

By PROF. E. B. HART and Associates
College of Agriculture, University of Wisconsin
Madison

SYNOPSIS

Owing to the fact that this subject matter was presented in its entirety by discussion on lantern slides not possible of reproduction here, the author presents the following summary for publication.—Editor's Note.

A profound anemia is readily produced in the young rat by a whole milk diet. A decline from a hemoglobin level of 11 gms. per 100 c. c. of blood to 2 to 3 gms. is induced in a 50 to 60 gms. rat in 6 to 8 weeks on the whole milk which we have used. This decline in hemoglobin cannot be arrested by the daily feeding of .5 mg. of Fe administered as the chloride, sulphate, acetate, citrate or phosphate prepared from a pure iron wire. When this same level of iron is obtained from dried liver or the *ash* of dried liver, corn grain or lettuce, the hemoglobin titre regains a normal level accompanied by normal growth and restoration to normal vigor.

The liver preparation for use in pernicious anemia prepared by the Eli Lilly Company under the direction of the Harvard University Committee was potent in correcting this anemia in our rats when fortified with a daily intake of .5 mg. of iron administered as $FeCl_3$. The ash of this preparation was likewise potent when fortified with .5 mg. of iron fed as $FeCl_3$. This ash, as well as the ash of lettuce, always had a pale blue color. This pale blue color as well as the fact that copper is known to be present in the respiratory pigment, hemocyanin, of certain crustacea, led us to try copper sulphate as a supplement to pure ferric chloride in the correction of anemia induced by a whole milk diet. The results were striking, consistent and so far have always been successful. With an animal at the threshold of death and a hemoglobin titre of approximately 2.5 gms. of hemoglobin per 100 c. c. of blood, the daily addition of either .01 mg., .05 mg., .10 mg., or .25 mg. of copper as pure copper sulphate plus .5 mg. of iron as ferric chloride progressively restored the hemoglobin level to normal. The copper salt used was of highest purity.

The ash of the Eli Lilly liver preparation,—used in the treatment of pernicious anemia,—owes its potency in the treatment of our type of anemia, when fortified with iron, to its copper content as demonstrated by fractionation with H_2S in HCl solution. We have no evidence of the existence in liver of an indispensable organic factor for hemoglobin building in our type of anemia. This same statement is true concerning the ash of lettuce.

These experiments explain our failure to correct anemia with pure iron salts and our success in its correction with ash of biological origin. These experiments also assign to copper a definite and specific role as a supplement to iron in the synthesis of hemoglobin in the mammal.

THE JOURNAL CLINIC

Diagnostic Problems

By L. M. WARFIELD, M. D.
Milwaukee

Last month we discussed the case of a woman, 49 years old, who complained of headache and staggering gait, had had buzzing in ears 13 years ago, had gradually lost hearing in right ear and had recently become very unsteady in her walking. Examination showed evidence of eighth nerve involvement both auditory and vestibular branches with bilateral choked disc, and increased deep reflexes.

DISCUSSION

It seemed evident after the complete history and physical examination that this patient was suffering from some intracranial pressure. Four years ago a diagnosis of multiple sclerosis had been made, the diagnosis being based very likely upon the peculiarity of speech, the staggering gait and the spasticity of the lower extremity muscles. However the reflexes were not equal on both sides

and the spasticity was not the same on both sides. The scanning speech was not very characteristic. There was no real intentional tremor and the abdominal reflexes were present. Whether the discs were choked at that time is not known. In reviewing this history carefully however there are several striking points which are very suggestive for a diagnosis. In the first place, the history of buzzing in the ears starting either during or immediately after pregnancy with gradual progressive deafness, staggering gait and headache, makes one suspect a tumor of the nervus acusticus or so-called cerebello-pontile-angle tumor. The diplopia, which later developed, is not unusual, in fact, it is recognized as a symptom. Then the trifacial neuralgia which lasted for awhile and then spontaneously disappeared is also described. There was also a peculiar fluctuation of the symptoms. At times she would be apparently quite free from symptoms, then again they would come on quite intensely. The nystagmus, the choked disc, the ptosis of the eye lid, the absence of corneal reflex on the right eye and the other signs all pointed to a definite intracranial growth and the swaying, tendency to fall to one side, the past pointing of the right side, all seemed to show that the lesion had ceased to be a simple tumor of the angle but had involved the cerebellum.

The further course was more violent headaches with unconsciousness and projectile vomiting. The blood pressure was then slightly raised but it was never very high. Operation, which was after all the last resort, showed a tumor in the situation diagnosed pressing upon the cerebellum. The patient died shortly following the operation, never recovering from the shock. Study of the brain removed post mortem showed that the tumor on the right side had been removed but there was a small tumor in the left angle apparently a prolongation through the pons of the large tumor.

Tumors of this kind are not so uncommon. At the Milwaukee County Dispensary we have seen four within the last two years. When one bears in mind certain symptoms and signs it should not be difficult to make a diagnosis. The onset is almost always with buzzing or roaring in one ear followed by deafness, then slight staggering gait, occipital headaches and often disturbances of vision. Several years may elapse between the initial ear disturbance and the time when symptoms are so outspoken that the patient seeks relief. If the cases are diagnosed fairly early a simple decompression operation will prolong life, and if the tumor is removable, life may be quite prolonged and made comfortable. Toward the final stages the operative mortality is in the neighborhood of 70 per cent so that these cases should be diagnosed as early as possible. Those who are interested in this subject, and all should be, will find a most interesting and fascinating description in Chapters V and VI of Dr. Harvey Cushing's "Tumors of the Nervus Acusticus," published by W. B. Saunders, Company.

A NEW PROBLEM

In the early part of October, 1928, I was called in consultation to see a 14 year old student at a neighboring military academy who had been ill for several days with fever, intermittent pain in the back accompanied by loss of appetite and nausea. Family history is negative. In the past history the boy was said to have fallen when he was a small child striking his back and since that time his back has not been considered strong. The exercises at the school caused him consirable discomfort and tired him more than they should have. About three weeks before he was taken with the present illness he had a small furuncle on his chin which quickly healed. He has otherwise been quite healthy having had no rheumatic fever and only the common children's diseases in mild form. The present illness began with pain in the back and fever with the usual febrile accompaniments and was thought in the first day or two to be an attack of simple influenza. However, after 4 or 5 days when his temperature was running up to 103 and down again to 99.5, his pulse was rapid, and nausea was extreme, a very tender third lumbar vertebra was discovered and tenderness and swelling of the right erector spinae muscles. There was so much pain that the boy could hardly turn over in bed. There was leukocytosis of 15,000 but the urine was free from albumin.

On examination the boy was found to be unusually large for his age and very well muscled and nourished. There was slight but definite stiffness of the muscles of the neck so that the head could not be flexed completely forward, there were no glandular enlargements, the lungs were quite normal, the heart was rapid but there were no murmurs. The adbomen was flat, everywhere soft, the liver and spleen were not palpable. There were no spots seen anywhere and deep palpation could everywhere be performed without discomfort. There was very acute tenderness on pres-

sure over the third lumbar spine. There was visible swelling of the erector spinae muscles on the right side extending from the 12th dorsal vertebra to the 4th lumbar and pressure opposite the 1st and 2nd lumbar vertebrae was very painful. There was no pain on pressure of the floating ribs on either side but there did not seem to be the normal tympanitic percussion resonance between the last rib and the crest of the ilium on the right side. The reflexes were all present and normal. There was a very marked bilateral Kernig's sign. It looked as if we were dealing with some rather serious condition and he was transferred to a hospital in the city for more complete examination.

Otogenous Extradural Abscess; Clinical Symptoms

By ARTHUR KOVACS, M. D.
Milwaukee

The complications which follow suppurative ear diseases are the bete noir that endanger the life of the patient; the prevention of these complications, the surgical and medicamentous warding off of the already developed endocranial involvements are the main object of the otiatry. The presence of the extradural abscess, or in the early stage as a pachymeningitis externa, as a rule, will be discovered in almost every case of otogenous endocranial process. When the infection penetrates deeper, this is the first station, which by leaving it to itself, will lead to lethal outcome. Leptomeningitis, following otitis, mastoiditis, always originates from a pachymeningitis which has escaped diagnosis, or was operated on at a late stage. The metastatic and the labyrinthine meningitis represent merely an exception, developing without the intercession of a pachymeningitis externa.

While the recognition of the extradural abscess is difficult, its diagnostic significance is eminent because of its grave consequences. The symptoms of the diseased middle ear and temporal bone veil the pathological picture of the pachymeningitis and the real status will be discovered only during the operation.

The localization of the site of the infection may arouse considerable difficulty too, however, it is regularly found where the purulent degeneration has reached the inner plate of the skull.

As far as the frequency is concerned, the perisinuously situated extradural abscess stands at first place, causing by periphlebitis and phlebitis sinus thrombosis and thus general sepsis. Another frequent localization may be found above the tympanic tegmen, or on the posterior surface of the petrous pyramid, in consequence of a labyrinthine suppuration.

Whatever may be the situation of the extradural abscess, however, it may attain a considerable expansion in the adult, without causing any rise in the temperature, while in children high temperature may appear at the onset of an acute otitis, without the existence of any complication, which would warrant surgical intervention. The manifestations of the diseases of the tympanic cavity and the mastoid process imitate that of the extradural abscess, the symptoms are identical, cover each other, the differentiation of the former from the latter, the assertion that the process passed the limit of the temporal bone, may cause considerable difficulty. The general symptoms are quite vague: weariness, loss of appetite, forgetfulness, inability for mental work, etc., all may originate from the diseased condition of the ear itself. The suspicion is more supported if limitations in the movements of the head are present, and thus the progression of the morbid process to the base of the skull may be presumed. Likewise, the appearance of voluminous mass of pus, especially in intervals, and if the indications of an increased brain pressure simultaneously abate with the sudden discharge, then we may assume that a fistula, leading from the mastoid cells to the extradural pus collection, got obstructed, and again suddenly became patulous.

In contrast with those extradural abscesses that run a nearly symptomless course, cases might be observed where in consequence of the pressure, the features of a brain abscess may be imitated. For instance, aphasia will manifest itself without any pathological process being in progress in the brain substance; or the pressure, exercised on the internal capsule, elicits contralateral paresis, with, or without including the facial nerve. Surely symptoms, indicating a grave sickness are more favorable for the patient than an endocranial complication with insidious advance, for in the endeavor, not to rest satisfied before the accordance of symptoms and operative finding, in majority of cases the direction and extent of the destruction will be discovered, and thus the extra-

dural abscess will not be left without recognition and surgical intervention.

It is evident, however, that such manifestations, indicating a more severe ailment than is the case, may be observed only infrequently, and it would be a big failure to wait for such. We have to draw our timely conclusion from scarce, apparently insignificant symptoms; as Lund so properly emphasizes, the importance of a symptom depends upon its association with others. Different time of occurence renders a symptom of entirely different importance.

We know, at the onset of an otitis, especially in children, serious symptoms may be experienced. High temperature, marked mastoid tenderness, abundant discharge, severe headache may be qualified as insignificant, but when once this storm has abated and then it rises again, it falls under an entirely new viewpoint. The following history will illustrate the aforesaid.

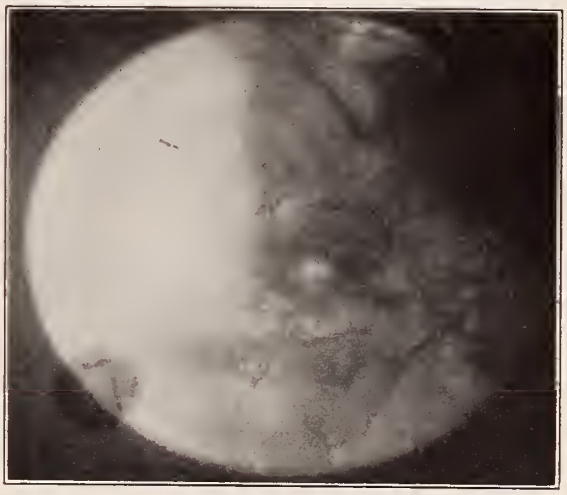
CASE REPORT

N. N. age 32, was taken sick on July 4, 1928, when he fell in the water. The same night he felt sharp pains in his left ear. His family physician prescribed some ear drops, and upon using same pain subsided and he went to his work until September 8; he never noticed any discharge. On the above date the pain recurred, much more intensively than at the first onslaught. He became dizzy, lost his appetite and spent a sleepless night. Ear drum was lanced the following day, some pus was oozing but the pain remained still excruciating, he had no relief whatever; he called again on his family doctor who found a sensitive mastoid process, diagnosed mastoiditis and brought him to the hospital on September 14, 1928. The relationship of the two seemingly independent onsets, that of July 4 and September 8, could easily be established through the patients hearing being diminished since the early part of July. Vomiting, dizziness, furthermore shivering on the previous day and upon examination temperature readily substantiated the diagnosis of an endocranial complication, with the probability that it was due to the mucous type of the streptococcus or pneumococcus. Insidious start, slight inflammatory symptoms, and very marked decrease in the hearing spoke for that type of infection.

One hour later a pneumatic mastoid process was put free, the cells were under heavy pressure of pulsating pus, around the descending part of the sinus large pus collection justified the diagnosis of a perisinous abscess, with fluid blood in the sinus. Bacteriologic finding confirmed the original suspicion, the infection was brought about by the pneumococcus mucosus. After the operation temperature gradually subsided to the normal, and against medical advice, patient left the hospital, in good condition, on September 22. As I understood he died short time after under the symptoms of a brain abscess.

Pulsation of the exuding pus at the inception of an acute otitis media is a common occurence, but if this pulsation continues over weeks, it increases with the amount of the pus, as in the following case report, it may be the result of the transmission of a dura pulsation.

E. S. 27 years old, never has been sick before, one sister and one brother died of tb. May 21, 1926, night attack of aching in the right ear, with increasing tendency over two days. Paracentesis was performed on the 24th, with immediate dis-



charge; temperature rose to 101. He had pain for two days, then the pain subsided; he did not experience any headaches. Secretion was continually profuse, did not disturb his general feeling, he slept well, had a satisfactory appetite. I saw the patient first on the 10th of June. His pale color, languid appearance impressed me.

He had no pain, temperature was 99.2, pulse 82. From the fundus of the right external meatus abundant, greenish, yellowish, non fetid pus was leaking, drumhead congested, swollen, not visible in details; bulging in the upper-posterior quadrant. Hearing: whisper ad concham. Left ear normal, Paracentesis was done. Following days patient fared well, no temperature, no pain or pressure of the mastoid process, but conspicuously large amount of pus evacuating under brisk pulsation.

June 16. Patient vomited, slept restlessly and felt at times piercing pain in the inflamed ear. Next morning condition improved, he ascribed the vomiting to the ice cream, taken on the previous day. Antrum region somewhat sensitive on pressure, pus vigorously pulsating. Temperature 102, Pulse 106. Patient refuses operation, referring to his general good feeling, does not attribute any importance to the vomiting. In order to convince him of the serious condition x-ray was advised which showed a mastoid process consisting of small and medium sized cells with a markedly increased density. The septa between the cells were very indistinctly outlined. The findings indicate an infiltration of the mastoid cells. Fig. I.

June 18, sallow face, poor sleep, at times painful sensation in the diseased ear. Pus conspicuously throbbing, cranial nerves free, eye fundus normal. No motor or sensory abnormality. Vomiting did not recur. With regard to the x-ray plate, patient gave his consent to the surgical procedure.

June 19. Antrotomy. Soft parts free, periost, corticalis of normal consistence, hyperemic. The cells of the pneumatic mastoid process are filled with granulation tissue, that are infiltrated with pus. At places the partition walls are destroyed, giving rise to small and large cavities. The cells extend in the squama and posteriorly in the occiput bone. Behind the antrum, and in connection with it, pulsating pus, which leads into a hole about the size of a hazelnut, the medial wall of it consisting of the dura, the latter hyperemic, lusterless, with fibrin apposition. Patient promptly recovered within four weeks.

Thus I found an extradural abscess, connected with the posterior skull cavity, the pulsation of which was propagated into the tympanum, displaying the throbbing at the otoscopic examination. As to the value of the throbbing, as an indication of otogenous extradural abscess, the opinion of different authors is divergent, in otological manuals altogether disregarded, though, it is evident this was an extradural manifestation with the cited patient, therefore one must bear it in mind in like condition.

TUBERCULOSIS and OTHER CHEST CONDITIONS

"Stop—Look—Listen"

By FRANK I. DRAKE, M. D.,
Milwaukee

That sign is posted at railroad crossings. It is said that the man who improvised that warning received one thousand dollars as prize money. It is good advice, too, for a doctor to follow in his practice. Such a procedure may not return to him a thousand dollars in spot cash, but in the course of a lifetime he may realize from it even more than a thousand. What is of more importance, his efficiency as a diagnostician will improve vastly and he himself will stand in a better light in the public eye.

No doubt, perfectly good automobiles have been wrecked by overlooking this caution. Otherwise perfectly good diagnostic ability has been wrecked by failure to heed its warning.

Before baring the chest to make a physical examination:

Stop—get a painstaking family and personal history of your patient.

Then exposing the chest:

Look—with eyes and hands.

Listen—with attentive ears through a good stethoscope.

Our best doctors say that, in making a diagnosis of tuberculosis, a thorough-going family and personal history is equally as important as a thor-

ough-going physical examination. It is important to know whether there is a history of familial tuberculosis. The disease is not as strikingly contagious as are measles and small pox, but a long continued residence—intimate contact—especially of children with a tuberculous parent, is almost sure to result in a transmission of the infection. Such contact may be the deciding factor in establishing a diagnosis of presumptive tuberculosis.

Then, the personal history demands the closest scrutiny. Such symptoms as excessive tire, indigestion, loss of weight and persistent cough should arouse immediate suspicion. Tie these symptoms up with an elevation of temperature and pulse rate, with perhaps a history of pleurisy, and you have a symptom complex that frequently spells tuberculosis.

The eyes and hands are invaluable aids in making a diagnosis. To the experienced eye there is something in an individual's makeup that arouses suspicion. Call it a "hunch" if you will. It is something that immediately puts you on your guard. It is this "hunch" which many old time physicians—capable men, too—relied upon considerably in making a diagnosis.

It seems to me that this "hunch" is explained by the appearance of fatigue, the dilatation of the pupils, the defective expansion of the chest, the lagging of one shoulder. If these are present together with a spasm of the trapezius muscle, or possibly an atrophy of the same muscle, you begin to feel quite certain that there is, or has been, some involvement of the lungs. An impaired resonance of one or both apices will add strength to your suspicions.

Certainly the temperature and pulse rate should be studied carefully in connection with the physical signs. An elevation of a degree of temperature with a corresponding elevation in pulse rate, in the absence of any other accountable condition, is suggestive of tuberculosis.

Finally, with an attentive ear, explore the supraclavicular and infraclavicular spaces, the supraspinous fossa and the interscapular area for moist rales. These are areas where we usually find beginning tuberculosis. After all, this whole procedure leads up to this very important sign, viz., the presence or absence of moist rales following exhalation and cough. However, one must be very guarded in making a diagnosis of tuberculosis from rales alone, for diseased tonsils or pyorrhea may cause them, but taken in connection with the foregoing signs and symptoms—especially if they come in "showers"—rales are only a little short of conclusive evidence of tuberculosis.

However, the last word in the diagnosis of phthisis is (1) a reaction from an intradermal injection of old tuberculin, (2) the presense of the tubercle bacillus in the sputum. Doctors are notoriously optimistic—it is a part of their business. But in the face of an otherwise unaccountable loss of strength and weight, unproductive cough, with an evening rise of temperature, better that he err in the opposite direction, even though no physical signs be present, and treat his patient as an incipient case of tuberculosis.

OCHSNER MEMORIAL LECTURE

The Third Albert J. Ochsner Memorial Lecture of the North Side Branch of the Chicago Medical Society will be given by George W. Crile, of Cleveland, on Thursday, February 21, 1929 at the Germania Club, Germania place and Clark street, Chicago.

This lecture will be preceded by a banquet in honor of Malcolm LaSalle Harris, President Elect, and Frank Billings, Arthur Dean Bevan and William Allen Pusey, Ex-Presidents of the American Medical Association of Chicago.

President William S. Thayer, the members of the Board of Trustees and other officers of the American Medical Association have accepted our invitation to these events.

For reservations ($2.50) communicate with Miss Wolff, 25 East Washington street, Chicago.

HORMONES OF PITUITARY GLAND

For his work in an investigation of the ductless glands and particularly in his isolation of pituitary hormones Dr. Oliver Kamm, director of chemical research of Parke, Davis & Company, manufacturing chemists, has been awarded the $1,000 prize by the American Association for the Advancement of Science for the "most noteworthy contribution to science presented at the annual meeting."

Some 2,000 scientists delivered addresses at this meeting, which was held in New York. The award was announced on January 2 by Dr. Henry Fairfield Osborn, president of the association.

The isolation of two hormones from the posterior lobe of the pituitary gland, as revealed by Dr. Kamm, is held by chemical scientists to be equal in importance to the isolation of insulin and the discovery of adrenalin.

Dr. Kamm isolated the alpha and beta hormones of the posterior pituitary after twelve years' work in the Parke-Davis Research Laboratories. This, incidentally, is the first time that anyone has demonstrated that one gland might contain more than one hormone.

The alpha hormone is the so-called oxytocic principle. The beta hormone is the blood-pressure-raising principle. Dr. Kamm also showed definitely that the beta hormone has the power of controlling the excessive output of water.

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EDITORIALS

DESERVES SUPPORT

TWO years ago the State Board of Medical Examiners proposed to the legislature that the Board be granted an appropriation of $5,000 a year to permit of the employment of a lay investigator to uncover the cancer quack and like gross frauds in the field of treating the sick. That bill passed both houses of the legislature by large majorities only to meet with veto from Governor Zimmerman on the ground that local enforcement officers should do this work.

This measure will be re-introduced in the session just opened. The need is self-evident to physicians and we call your attention in this column to the bill only to the end that each may present its merits to his assemblyman and senator. The bill deserves to become a law at this session.

LIABILITY RATHER THAN ASSET

AGAIN Wisconsin physicians are being solicited to have their names published in a directory which is ostensibly a ready reference for those who wish to secure physicians to handle industrial or insurance cases. The charge for the privilege of having one's name so listed varies generally from $5 to $20.

In our opinion such schemes are a liability rather than an asset to the physician.

THE ART OF MEDICINE

ON VARIOUS occasions I have maintained that if, for a certain period, the surgeon was forced to attend so-called medical clinics and to read medical literature, while the medical man did the reverse, the result would be beneficial to physicians, surgeons and of more importance to the patient. As demonstrating that what was preached was practiced I desire to urge the studious perusal of the short but masterly article by James B. Herrick entitled, "Comments on the Treatment of Heart Disease" in the J. A. M. A., Dec. 8, 1928, Vol. 91, No. 23.

If Dr. Herrick's remarks could be read by so-called specialists in all branches of the practice of medicine, his recommendations be taken to heart, so to speak, and applied by the reader to his particular field of endeavor, the art of medicine would rapidly assume its rightful position, on equal footing with the science of medicine.

The essayist in speaking of the analogy between heart disease and pulmonary tuberculosis says, "Heart disease and tuberculosis are not the same, yet the mistake of diagnosing wrongly may, in either instance, lead to direful consequences, unnecessary fear, lives of inactivity, enormous economic loss." It was probably the anatomic relationship that prompted this comparison.

Speaking generally, these remarks might hold equally true in cases of "stomach ulcers," "cholecystitis," "appendicitis," "ureteral stricture," "tonsillitis," etc., etc., etc.

For example, by substituting ulcer of the stomach for heart disease and making slight consequential changes in the context, one would find that practically all Herrick's generalizations, and most of his particularizations, equally true.

In the introduction emphasis is placed upon the consideration of *modes of living* in an attempt to prevent or postpone the development of disease; also upon the importance of the *types of the different individuals;* and the necessity of learning more relative to degenerate processes of adult and senescent years, "Concerning which" the author says, "there is so much speculation and so little accurate knowledge."

The latest advances in therapy—surgical, dietetic, medicinal, are not considered—some are "understandable and others merely a maze of words."

Rest and digitalis are the main stays of treatment; if we substitute "alkali" for digitalis, the remarks may be very fitting for the gastro-enterologist.

After outlining treatment consisting of rest, digitalis, (alkali) opium for pain and laxatives, Herrick says, "This is good treatment and need not be discussed"—and in the next sentence hits the nail squarely on the head,—"but there are occasional misapplications of the general principles to which reference may properly be made."

After very concise and eminently sane considerations of rest and digitalis one finds the important remarks, "The greatest fault, however, is giving digitalis (alkali) without any indication for its use except the diagnosis of heart disease (ulcer of the stomach) and the *diagnosis is sometimes wrong?"*

Herrick's reference to the fact that in many of these cases there has been a mistake in diagnosis that had led to the unnecessary use of digitalis (alkali) as "straying a little from the subject of treatment" seems unnecessarily apologetic; as treatment must necessarily and fundamentally depend upon diagnosis.

Such errors of diagnosis are explained by "ignorance, haste, laziness, indifference, too great reliance upon x-ray or electrocardiograph." But he believes, "that the greater number are to be explained by the fact that the physician has a surplus of honesty and is desirous of making an *early* diagnosis of heart disease (gastric ulcer, cholecystitis or appendicitis.) He has heard from teachers, he has read in the medical journal that the early diagnosis of heart disease as of tuberculosis or cancer (as of gastric ulcer, cholecystitis and appendicitis) is the great desideratum. But he has not read of the errors in the diagnosis."

In conclusion one is given a few helpful facts that have to do more with the treatment of the patient than of the disease; some pertinent remarks regarding periodic health examinations and the necessity of competent examiners who understand human nature as well as disease; and finally a plea for individualization in treatment.

If you have not read this, do so; and if you have, read it again.—*F. G. C.*

ASSOCIATION FOR STUDY OF GOITER

The annual meeting of the American Association for the Study of Goiter will be held this year at Dayton, Ohio, on March 25, 26 and 27. The primary object of this association is to bring together each year men who are especially interested in the study of goiter and its associated problems. Members of state and provincial medical societies are eligible and cordially invited to participate as attending members.

The 1928 meeting, which was held at Denver, was a decided success. Professor B. Breitner of the Von Eiselsberg Clinic of Vienna and Dr. Gulbrand Lunde, professor of biochemistry of Oslo, Norway, were the foreign guest speakers. Drs. H. S. Plummer, S. F. Haines, J. deF. Pemberton and William Boothby of the Mayo Clinic held clinics and presented papers. Among the other contributors to the program were W. Blair Mosser of the University of Pennsylvania; W. H. Cole, N. A. Womack and S. M. Gray of Washington University, St. Louis; A. E. Hertzler, Halstead, Kansas; J. L. DeCourcy, Cincinnati; Allen Graham, Cleveland; H. M. Clute of Lahey Clinic, Boston; J. Tate Mason of Mason Clinic, Seattle; and Willard O. and P. K. Thompson of the Massachusetts General Hospital Thyroid Clinic.

The first day of the Dayton meeting will be given over to diagnostic clinics in the morning and several short papers during the afternoon chiefly concerned with recent experimental work. On the second day, operative clinics will be held at the Miami Valley Hospital, St. Elizabeth's Hospital and at the Soldiers' Home Hospital. The afternoon of the second day and the morning and afternoon of the third day will be given over to the presentation and discussion of scientific papers.

The headquarters will be at the Hotel Miami. Dr. William A. Ewing is president of the Montgomery County Medical Society under whose auspices the meeting is to be held. Dr. E. M. Huston is the general chairman of the Committee on Arrangements. Dr. H. C. Haning is chairman of the Hotel Committee. All communications in regard to hotel reservations should be addressed to Dr. Haning at the Reibold Bldg., Dayton, Ohio.

THE PRESIDENT'S PAGE

OUR "SECOND FIFTY YEARS"

THE marvelous advances the medical sciences have made within the last fifty years are a source of satisfaction and pride to all workers in this field, investigators, research men and also to the physician. As one example of this progress, one that even the lay public is able to plainly see and understand, we often hear mentioned this fact—that the average length of human life which one hundred years ago was considered to be from twenty-five to thirty-five years, now has been increased to forty-five and fifty and considerably over. It is, of course, a compliment to the science and art of medicine that such should be the case and it brings with it the vision and the hope that the biblical allotment of three score and ten may be increased far beyond this limit.

At a recent meeting of the Northwestern Railway Surgeons in Chicago, a speaker discussing this subject enthusiastically spoke of "our second fifty years of life." One often hears the assertion that sooner or later modern science will be able to extend man's span of life to one hundred years and over. Whether this is possible is, of course, a question. One should bear in mind, however, that the lengthening of the "average" years of human life as shown by statistics is not so much due to the fact that a greater number of men have lived beyond three score and ten, as it is the result of the saving of life at the other end, in the first decade. It is the preservation of child life, the prevention of the enormous death rate in children, which a century ago amounted to three out of every four. Furthermore, the absence and conquering of the great epidemics, such as smallpox, bubonic plague and others have served to raise the average years of human existence considerably. Recent statistics showing the existence of an unusually large number of human beings that have reached the age of eighty or over are not available and if they were they could not be used to compare with conditions of fifty years ago, since at that time no such compilation existed. It is not likely that medical science can effect a change in the biologic order of animal and cell life. Birth, reproduction and death is the order of things. To preserve and keep agoing the species is the aim, the individual amounts to nothing. The one cell animal, to propagate, divides and there are two beings; these again divide and there are four. In this process of reproduction the single individual cell disappears but there is no corpse and consequently there could have been no death. This is immortality. It is probable that the amoeba of today does not differ from the unicelled animal of the age when life first disappeared on this earth. It is different with the multicelled beings, with animals and man. Perhaps in the combination of billions of cells of which animals consist, the sperm cell and the ovum cell alone are immortal; all the rest die. There is an endogenous and inherent limitation to the life of the cells of the multicelled being. How otherwise can we explain the varying lengths of life typical for a bird, a dog, an elephant or a parrot that lives a hundred years or more, and that fly that lives but a day? So it is with man. We cannot change this biologic anlage.

It is likely that "the second fifty years" of our life will remain a hope and a dream, attained only by those where longevity is a family characteristic. If the art and science of medicine can do anything, and it can, to permit the individual human being to fully live his seventy or eighty years free from disease and pain and in vigor and power, medicine will have amply fulfilled its mission. It is not likely that it will ever change man's biologic inheritance.

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SOCIETY PROCEEDINGS

ASHLAND-BAYFIELD-IRON

At the annual meeting of the Ashland-Bayfield-Iron Counties Medical Society, the following officers were elected for 1929: President, D. R. O. Grigsby; vice president, Dr. C. O. Hertzman; secretary-treasurer, Dr. M. L. Young, and censor for three years, Dr. W. J. Tucker. *M. L. Y.*

BROWN-KEWAUNEE

The Brown-Kewaunee County Medical Society held its last meeting for the year 1928 at the Beaumont Hotel, on December 20th. Dinner was served at six o'clock to thirty-one members.

Drs. Williamson, Jordan and Troup were admitted to the society and a resolution was passed that the society go on record as opposed to any fee being charged for state liquor permits. Dr. Wochos of Kewaunee read a report relative to state medicine and industrial insurance. Directly following the report officers were elected for the ensuing year: President, Dr. E. S. McNevins; vice president, Dr. E. S. Knox; secretary-treasurer, Dr. M. H. Fuller; censor, Dr. O. A. Stiennon; delegate to the State meeting, Dr. R. L. Cowles; alternate, Dr. W. M. Wochos. Drs. W. E. Fairfield and R. M. Carter were appointed as the program committee.

Dr. W. E. Leaper presented a case of a fractured shoulder with x-ray pictures and Dr. I. E. Levitas discussed an unusual operative kidney case. *M. H. F.*

DANE

The $425,000 Dane county tuberculosis sanatorium to be built with funds from a one-mill tax in 1929 and 1930 should be built in or near Madison, the Dane County Medical Society urged in a resolution adopted at its meeting on Thursday, December 20th, at the Madison Club.

Dr. H. H. Reese, Madison, former secretary-treasurer, was elected president to succeed Dr. H. P. Greeley. Dr. H. Weiland, Verona, was chosen vice president and Dr. Clarence K. Schubert, Madison, secretary-treasurer. *C. K. S.*

COLUMBIA

Dr. C. W. Henney was elected president of the Columbia County Medical Society at its annual meeting held at Hotel Raulf, Portage, on December 19th. Dr. J. R. Kellogg was chosen vice president; Dr. H. E. Gillette, secretary-treasurer; Dr. W. A. Taylor, censor; Dr. A. F. Schmeling, delegate, and Dr. H. E. Gillette, alternate. Drs. H. M. Caldwell, Columbus; A. H. Wedge and W. E. Williams, Cambria; H. E. Gillette, Pardeeville and G. F. Treadwell, Friendship, were appointed members of the committee to confer with the assemblymen.

The society adopted a resolution that they would make injections for the immunization of diphtheria in schools for one dollar for the three injections. This is in accordance with the state program. *H. E. G.*

DOUGLAS

The regular monthly meeting of the Douglas County Medical Society was held at the Androy Hotel, Wednesday evening, January 2nd. Dr. George L. Berdez, pathologist at St. Mary's Hospital of Superior and Duluth, presented a paper on "Tumor of the Kidney." *J. W. McG.*

EAU CLAIRE

The annual election of officers for the Eau Claire and Associated Counties Society resulted in the following. Dr. F. S. Cook, president; Dr. F. G. Anderson, vice president; Dr. E. E. Tupper, secretary; Drs. A. L. Payne, E. E. Tupper and W. O. Seeman, censors; Dr. F. C. Kinsman, Eau Claire, and Dr. J. A. Halgren, Menomonie, delegates to the state meeting, and Dr. R. E. Mitchell, Eau Claire, and Dr. O. J. Blosmo, Menomonie, alternates. *E. E. T.*

FOND DU LAC

Dr. Edward L. Miloslavich, pathologist at St. Mary's Hospital, Milwaukee, addressed the members of the Fond du Lac County Medical Society at a meeting at Hotel Retlaw on Wednesday evening, December 12th. His subject was "The Relation of the Vagus Nerve to Clinical Diseases." His talk followed a dinner which was attended by about thirty members of the society. *H. R. S.*

JEFFERSON

Dr. E. W. Bowen, Watertown, was chosen as president of the Jefferson County Medical Society at its annual meeting held on December 13th at Jefferson. Dr. W. M. Johnston, Johnson Creek, was elected vice president; Dr. M. G. Peterson, Lake Mills, secretary-treasurer; Dr. H. O. Caswell, Fort Atkinson, delegate for two years, and Dr. H. P. Bowen, Watertown, alternate. *E. W. B.*

KENOSHA

At the annual meeting of the Kenosha County Medical Society, held at the Chamber of Commerce rooms, Dr. H. A. Binnie was re-elected president of the society. Dr. W. H. Bennett was elected to the vice presidency to succeed Dr. J. W. Lane, and Dr. Margaret Pirsch was re-elected as secretary-treasurer.

Dr. K. E. Kassowitz, Milwaukee, gave an interesting talk on "Occult Tuberculosis in Childhood." *M. P.*

LA CROSSE

The La Crosse County Medical Society held its regular monthly meeting at the Pioneer Hall, Tuesday, December 18th. The regular order of business was taken up after which a report, given by a committee of three, appointed to visit the class of crippled children was heard. The society agreed that these children should receive proper care and that weekly or bi-weekly examinations should be carried out and proper records kept.

The election of officers for the year 1929 resulted in the following being elected: President, Dr. N. Philip Anderson; vice president, Dr. F. A. Douglas; secretary-treasurer, Dr. J. E. Heraty; delegate, Dr. Gunnar Gundersen; alternate, Dr. W. J. Jones, and censor, Dr. F. A. Douglas.

The members met again on January 15th when Mr. Newbill of the National Dairying and Food Commission,

gave a short talk on different foods and their value. Dr. W. S. Middleton, of the Wisconsin General Hospital, Madison, spoke on "Influenza and Lumbar Pneumonia." *J. E. H.*

LANGLADE

The Langlade County Medical Society held its annual meeting at the Butterfield Hotel, Thursday evening, December 20th, when a fine chicken dinner was served. The meeting was called to order by President M. J. Donohue. The minutes of the last meeting were read and approved. A resolution was passed that the Langlade County Medical Society hold monthly meetings during the coming year, the first meeting to be held in February and on the first Wednesday of each month thereafter. The society also went on record as opposing the taxing of physicians for the privilege of writing prescriptions for liquor. Other legal matters were discussed at some length and resolutions passed.

The next order of business was election of officers for the year. They include: President, Dr. P. J. Dailey, Elcho; vice president, Dr. G. E. Moore, Antigo; secretary-treasurer, Dr. J. C. Wright, Antigo. Dr. Wright was chosen as delegate to the state medical meeting and Dr. J. W. Lambert as alternate. Dr. R. J. Portman's application for membership was acted upon favorably by the society and he was duly elected as member.

The business meeting being concluded the president introduced Dr. Phillips F. Greene, of the Wisconsin General Hospital, Madison, who addressed the society on "Iodine with Relation to Thyroid." *J. C. W.*

MILWAUKEE

Dr. John W. Harris, professor of obstetrics and gynecology at the University of Wisconsin, addressed the members of the Milwaukee County Medical Society at a meeting held on January 11th at the Medical Arts Building. "Infection Following Pregnancy" was the subject of Dr. Harris' paper. *E. L. T.*

OUTAGAMIE

The members of the Outagamie County Medical Society entertained their wives at a dinner at Hotel Northern, Appleton, on December 11th. The Rev. H. S. Gatley, rector of All-Saints Episcopal Church, gave an after-dinner talk entitled "A Tribute to the Medical Profession."

Dr. G. J. Flanagan, Kaukauna, was named president of the society to succeed Dr. E. L. Bolton. Other officers elected were: Dr. D. M. Gallaher, vice president; Dr. Carl Neidhold, secretary-treasurer; Drs. G. A. Ritchie, J. L. Benton and C. Reineck, censors; Dr. Victor F. Marshall, delegate, and Dr. J. B. MacLaren, alternate.

The following secretary's report was presented for the year 1928:

During the year 1928 nine meetings were held, viz; January 13th and February 9th at Hotel Northern, March 15th at Hotel Conway, April 24th at Hotel Northern, June 11th at Elks Club and Hotel Conway, September 25th at Riverview Sanatorium, October 25th at Hotel Conway, November 20th and December 11th at Hotel Northern. Scientific papers and discussions were presented at seven of the meetings. The January meeting was devoted to business of the society, the December meeting was devoted to a presentation from the clergy and entertainment of the doctors and their ladies. The following visiting doctors appeared before the society and presented scientific papers:—Doctors Philip Lewin, Sidney Portis, F. A. Stratton, F. B. Murphy, Walter C. Alverez, P. R. Jones, Paul B. Magnusen, F. E. Adair, George Suker, L. F. Jermain, W. F. Roethke, and Bernard Portis.

The Outagamie County Medical Society acted as host for a combined meeting of the Sixth and Eighth Districts Medical Society on June 11th, 1928 at Appleton.

The average attendance at meetings was 26 members per meeting. There were many visiting doctors from neighboring societies at every meeting. The society now has 46 members in good standing . Three members:—Doctors Harrington, Halloin and Huberty have been added to membership during the past year, none have been lost.

The January meeting of the society was held at the Hotel Northern on January 24th. Dr. V. F. Marshall, Appleton, presented a paper on "Ankle Fractures with Special Emphasis on Treatment and Early Return of Function." *C. D. N.*

PORTAGE

Dr. Carl von Neupert was elected president of the Portage County Medical Society at its annual meeting held at the office of Dr. G. H. Lawrence on December 19th. Dr. E. P. Crosby was chosen vice president; Dr. F. R. Krembs, secretary-treasurer; Dr. Erich Wisiol, delegate; Dr. F. R. Krembs, alternate, and Dr. W. F. Cowan, censor.

Dr. Phillips F. Greene, University of Wisconsin, addressed the meeting, giving a talk on "Native Medical Practices in China." Dr. Krembs reported on the Secretaries' Conference held at Chicago. *F. R. K.*

RACINE

The annual meeting of the Racine County Medical Society was held on December 20th at 4:00 p. m. at St. Mary's Hospital, Racine. Dr. E. L. Sevringhaus, Madison, gave an interesting address on the subject of "Obesity."

Officers for the ensuing year were elected as follows: President, Dr. John Docter; vice president, Dr. George L. Ross, secretary-treasurer, Dr. Susan Jones; censor, Dr. F. W. Pope; delegate, Dr. H. B. Keland, and alternate, Dr. L. E. Fazen.

Drs. C. F. Brown, R. J. Schacht and George H. Jamieson, all of Racine, were duly elected members of the Racine County Medical Society. *S. J.*

ROCK

Dr. F. B. Farnsworth, Janesville, was elected president of the Rock County Medical Society at the annual meeting held Tuesday evening, January 8th, at Hotel Hilton. Dr. F. A. Thayer was named vice president and Dr. H. E. Kasten, secretary-treasurer.

J. W. Yates, of the department of markets, Madison, presented an interesting paper on "Milk Sanitation." Mr. Yates told of the methods used to produce, test and market pure milk and showed stereopticon slides as part of his lecture. *H. E. K.*

SHEBOYGAN

At a meeting of the Sheboygan County Medical Society held on December 27th, the following officers were elected for 1929: President, Dr. C. J. Weber; vice president, Dr. Harry Heiden; secretary-treasurer, Dr. R. G. Zaegel; delegate, Dr. Otho Fiedler; alternate, Dr. C. J. Weber, and censor Dr. G. H. Stannard. *C. J. W.*

TREMPEALEAU-JACKSON-BUFFALO

Members of the Trempealeau-Jackson-Buffalo County Medical Society were entertained at the home of Dr. and Mrs. C. O. Rogne of Ettrick, on Friday, December 28th. The meeting was the last of the year and a general closing of the year's business was in order. Dr. V. H. Cremer, recently associated in practice with Dr. H. A. Jegi, Galesville, was made a member of the society.

The subject under discussion at the meeting was "Preventive Medicine," with particular stress upon children's diseases. Dr. R. L. MacCornack, Whitehall, read a report on the Secretaries' Conference. At the close of the afternoon's program, a five-thirty dinner was served by Dr. and Mrs. Rogne to their guests. *R. L. MacC.*

WALWORTH

A meeting of the Walworth County Medical Society was held on Tuesday, December 11th, at the Gateway Hotel, Genoa City. The following officers were elected for 1929: President, Dr. E. T. Ridgway; vice president, Dr. E. Sorenson; secretary, Dr. S. G. Meany; delegate, Dr. Edward Fucik; alternate, Dr. M. V. DeWire; censor, Dr. W. H. McDonald.

The society adopted the following resolution of condolence to Dr. Ridgway and ordered that copy be spread on the minutes and a copy be sent to the family: "Be it resolved that we, members of the Walworth County Medical Society, beg to extend our deepest sympathy to you and your family in your bereavement."

Dr. W. H. McDonald, Lake Geneva, presented a paper on the "Therapeutic Application of the X-Ray in General Practice," and Dr. Frederick Christopher, Winnetka, Ill., talked on the "Treatment of Fractures," illustrated with lantern slides. Dr. R. A. Mullen was admitted to the society by transfer from the Racine County Society.

During the year eleven meetings were held with the following speakers on the program: Dr. C. V. Bachelle, Chicago; Dr. Frances Murphy, Milwaukee; Dr. S. J. Seeger, Milwaukee; Dr. Walter Kearns, Milwaukee, Dr. A. A. Pleyte, Milwaukee; Dr. R. S. Cron, Milwaukee; Dr. P. F. Greene, Madison; Dr. J. Gurney Taylor, Milwaukee; Dr. E. L. Sevringhaus, Madison, and Dr. Frederick Christopher, Winnetka, Ill.

At a meeting of the society on January 8th at Elkhorn Dr. M. G. Peterman, Milwaukee, spoke on "Infant Feeding" and Dr. T. L. Jacobson, Delavan, presented a paper on "Tonsil Infections and Indications for Removal." A chicken dinner was served the members and their wives. *S. G. M.*

WASHINGTON-OZAUKEE

The members of the Washington-Ozaukee County Medical Society met at the city council rooms at West Bend on Thursday evening, December 13th. Dr. M. G. Peterman, Milwaukee, gave an address on "Modern Infant Feeding" and Dr. Carl Eberbach, also of Milwaukee, spoke on "The Diagnosis and Classification of Goiter." *P. M. K.*

WINNEBAGO

The monthly meeting of the Winnebago County Medical Society and its annual election of officers was held at the residence of Dr. F. Gregory Connell on December 21st. Dr. D. J. Ryan was named president; Dr. George V. Lynch, vice president; Dr. W. N. Linn, secretary-treasurer; Dr. J. W. Lockhart, delegate; Dr. W. P. Wheeler, alternate, and Dr. D. G. Hugo, censor.

The secretary gave a report of the Secretaries' Conference at Chicago following which Dr. R. B. Rogers, Neenah, spoke on "Practical Dermatology," and Dr. H. E. Johnston, Oshkosh, on "Right Sided Heart."

The meeting was well attended. A delicious lunch was served by Mrs. Connell at its close. *W. N. L.*

WOOD

The annual meeting of the Wood County Medical Society was held at Wisconsin Rapids on January 17th. The session opened with a dinner at the Witter Hotel followed by election of officers for the new year. They include: Dr. Ed Hougan, president, Dr. R. P. Potter, vice president; Dr. W. G. Sexton, secretary-treasurer; Dr. F. X. Pomainville, delegate to state meeting; Dr. K. H. Doege, alternate, and Dr. F. X. Pomainville, censor for three years.

The following program was presented: "Crossed Eyes in Children," Dr. W. G. Merrill; "The Differential Diagnosis Between Renal Lithiasis and Cholelithiasis," Dr. R. P. Potter; "Ring Worm," Dr. S. G. Schwarz, and "Report of the Secretaries' Conference," Dr. W. G. Sexton. Prof. A. B. Kanavel, Chicago, displayed a three reel kadoscope film on "Diagnosis and Treatment of Infections of the Hand." *W. G. S.*

GREEN BAY ACADEMY

The January meeting of the Green Bay Academy of Medicine was held on the 9th of the month at St. Mary's Hospital. Dr. T. J. Oliver read an interesting paper on "The History of Medicine in Green Bay" and Dr. Lewis Milson presented a thesis on "The Injunction Treatment for Varicose Veins."

MILWAUKEE ACADEMY OF MEDICINE

Promotion of the scientific service of the Academy of Medicine and of the endowment fund, were the pledges of Dr. J. P. McMahon in accepting the Presidency on January 8th. He succeeds Dr. Arthur W. Rogers of Oconomowoc. Dr. McMahon's address in part follows:

The question and problems of the academy are naturally divisible into two main groups: First, those concerned with 'the promotion of medical science,' and second, those concerning the academy's property. The promotion of medical science may be considered under (a) scientific programs and (b) library service.

It will be the policy of your president, and I believe likewise of your council, so to conduct the affairs of the academy during 1929 as to make opportunities when at all possible and to improve all opportunities which present themselves to promote the science and art of medicine to the extent which the same may be undertaken with the income available for such purposes.

An efficient library service is a sine qua non to the successful promotion of the science of medicine or of any other science. It is therefore a necessary part of the armament of the medical profession of this community in order that the physical welfares of its inhabitants shall be conserved to the fullest extent possible. Our library service compared with the ideal and compared with that of other centers of similar population has been only mediocre, and the cost of maintenance has been financially burdensome to the majority of our members. Dr. Ernest Copeland's recent presentation of his equity in our present property, estimated as having a current value of approximately $70,000.00 to be used as a nucleus with which to establish permanent quarters for the library—Dr. A. W. Rogers' gift of $5,000.00 to be appropriated to subscriptions for current magazine service—and the $8,300.00 recently secured by Chairman Carhart of the Endowment Fund Committee from the following members:

C. H. Davis, W. J. Egan, O. H. Foerster, J. F. Gaenslen, W. L. Herner, Frank Munkwitz, J. J. McGovern, A. J. Patek, R. W. Roethke, G. E. Seaman, S. J. Seeger, Rock Sleyster, A. W. Sivyer, Wm. Thorndike, L. M. Warfield—and the service of the Milwaukee Public Library personnel constitute an excellent start towards the establishment of adequate library service.

In numerous other communities, financially affluent citizens and corporations have individually and collectively endowed medical libraries, notably:

The John Crerar Library, Chicago, which maintains a special Medical Department and which has an income for all departments of approximately $285,000.00 per annum.

The New York Academy of Medicine which was recently presented with $1,550,000.00 by the Carnegie Corporation with which to erect a library building and assembly hall, and which was later presented with an annual income of $62,500.00 by the Rockefeller Foundation. Fellows of the New York Academy of Medicine subscribed $206,161.64 and friends of Fellows subscribed $324,922.78 in addition to the above-cited gifts from the foundations. The "moral" for us is self-evident. Contributions to our endowment fund by members should be more general before we may gracefully undertake to enlist the financial assistance of laymen.

The Cleveland Medical Association has owned its own building since 1698 and has an annual library maintenance fund of approximately $20,000.00.

We know that there are many wealthy citizens in Milwaukee.

We know that there are some among them as idealistic and as civically enterprising as are the citizens of other centers of population.

It does seem as though some few citizens might interest themselves in the Academy's library problem and thereby assist us to place our library on a more serviceable and enduring basis, to the end that the medical service which shall be rendered the people of this community shall always be of the highest possible standard.

An endowment committee consisting of members will be appointed, with the hope that the presentations from members shall be increased from the present total of $78,300.00 to $125,000.00. After this goal has been reached the board of trustees particularly the lay members will be asked to interest themselves in the appointment of a laymen's committee, charged with the task of securing an additional $125,000.00 from contributors not members of the medical profession thereby making the total endowments $250,000.00 with an approximate fixed annual income of $12,500.00.

In considering the problems attendant upon the management of the property the questions naturally arise as to whether—to hold and occupy it as it is—to undertake to improve it—to dispose of it and to invest our equity in securities—to dispose of it with the expectation of acquiring a new site and negotiating a favorable long-term lease with an individual or corporation financially able to erect a modern office building for the accommodation of a sufficient number of members of the medical and allied professions as to enable the individual or corporation to make space available, without charge, for the housing of the academy's library and an assembly hall adequate for meetings of the medical and dental professions of the city and county.

It will be the policy of your president, acting as an ex-officio member of your board of trustees, and I believe likewise of your board of trustees, so to manage your property as to make it serve in the best possible manner the immediate and remote purposes for which the academy's equity in it was presented.

MILWAUKEE PEDIATRIC

The first meeting of the Milwaukee Pediatric Society for 1929 was held at the Milwaukee Children's Hospital on January 9th. The scientific program consisted of the following papers: "Correlation of Roentgenological and Autopsy Findings in Children" by Dr. L. C. Bigler, Children's Memorial Hospital, Chicago; "Aspiration in Empyema of Children with Report of Thirty-One Consecutive Cases" by Dr. E. McEnery, Children's Memorial Hospital, Chicago; "Massive Collapse of the Lung in Children" by Dr. J. A. Brennemann, Children's Memorial Hosptal, Chicago. *F. R. J.*

MILWAUKEE OTO-OPHTHALMIC

The annual meeting of the Milwaukee Oto-Ophthalmic Society was held Tuesday evening, January 15th at the Wisconsin Club. The meeting was preceded by a dinner.

The following case reports were presented: Agranulocytic Angina" by Dr. Julian B. Marks, "Temporal Lobe Abscess" by Dr. O. P. Schoofs and "Cerebello-Pontine Angle Tumor" by Dr. Thomas F. McCormick. *E. R. R.*

MILWAUKEE ROENTGEN RAY

The Milwaukee Roentgen Ray Society met January 4th at the Wisconsin Club. Following dinner the society and their guests were addressed by Dr. Byrl R. Kirklin of the section on roentgenology, Mayo Clinic, on the subject of "Unusual Gastric Lesions" being accompanied by a lantern slide demonstration.

At the business meeting the following officers were elected for the year 1929: Dr. G. W. Stevens, president; Dr. A. M. Dorr, vice president; Dr. J. E. Habbe, secretary-treasurer; and Dr. F. W. Mackoy, librarian. *J. E. H.*

NEWS ITEMS AND PERSONALS

Heart disease has for many years held first place as a cause of death in Wisconsin, reports the State Board of Health, and the figures for 1928 probably will show it to be still at the head of the list. This disease holds similar rank in the United States as a whole.

The deaths from cardiac causes have mounted regularly in Wisconsin over a long period. The trend is shown in the following death totals from heart disease: 1920, 3,124; 1921, 3,372; 1922, 3,552; 1923, 3,654; 1924, 4,110; 1925, 4,368; 1926, 4,740; 1927, 5,166. In 1927 this disease was responsible for 17.4 per cent of all deaths.

Next to heart disease as a cause of death in Wisconsin stands cancer, which likewise shows an uninterrupted rise in mortality. Next in order as leading death causes are cerebral hemorrhage, nephritis, pneumonia, accidents, and tuberculosis. The greatest diminution is witnessed in the case of tuberculosis.

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Dr. Ralph M. Carter, of Green Bay, has recently returned from abroad and resumed his practice. Early in September he presented a paper on the "Determination of Permanent Disability Following Head Injuries" before the Fifth International Congress for Industrial Accident Surgery and Occupational Diseases at a meeting in Budapest. Following this, Dr. Carter spent several months in special study in orthopedics and bone surgery in Vienna, London, and other foreign clinics.

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Dr. E. C. Armstrong, Oconto's oldest practicing physician, was appointed health commissioner by the Oconto Common Council recently to fill the vacancy caused by the death of Dr. C. W. Stoelting.

This will be Dr. Armstrong's third term as health officer for that city. He first filled the office in 1899, and successfully combated the contagion of small pox which infested the city immediately after the return of the soldiers from the Spanish-American war. He was again made health commissioner in 1902.

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Drs. R. M. Kurten and F. W. Peil, Racine, who had offices in the Arcade building for the past five years are now located on the second floor of the Miller building on Sixth street. The quarters have been remodeled into the most up-to-date medical and dental offices.

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Dr. Damon A. Brown, 14 East Mifflin St., Madison, announced recently that he will include in his practice diagnosis and internal medicine but will continue to give special attention to diagnosis and treatment of diseases of the genito-urinary tract.

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The $425,000 Dane county tuberculosis sanatorium to be built with funds from a one cent mill tax, in 1929 and 1930, should be built in or near Madison, is the opinion of the Dane county medical society in a resolution adopted at a December meeting. The physicians were practically unanimous in their belief that Madison offered the most advantages for the sanatorium which will be paid for by Dane county tax payers. Madison advantages include: central location, sewerage and light, economy in building, because of easily available labor and materials, nearness of surgical facilities, recreational facilities and a variety of sites having not only beauty but convenience of transportation.

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The Rotary Club of Ashland was addressed in December by Dr. R. O. Grigsby, who chose for his subject, "What is Wrong with our Heads."

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Dr. R. W. Adams, of Chetek, had an experience recently that will be long remembered when his new 1929 Buick sedan failed to make a turn in the road and performed a complete "turtle", alighting right side up. The car was badly damaged but Dr. Adams was without serious injuries.

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The condition of Dr. W. J. Tucker, Ashland, who underwent an operation at St. Louis, Mo., shortly before Christmas is reported as very favorable.

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Dr. J. R. Minahan, Green Bay, was elected president at the seventeenth annual meeting of the Surgical Association of the North Western railroad held during December at Hotel Sherman, Chicago. He succeeds Dr. C. H. Mayo of Rochester, Minn. Other officers are Dr. J. M. Dodd, Ashland, first vice president; Dr. Karl Doege, Marshfield, second vice president; Dr. C. W. Hopkins, Chicago, secretary-treasurer and chief surgeon, and Dr. O. C. Morrison, Carroll, Ia., member of the executive committee.

Among other Wisconsin physicians in attendance at the meeting were Drs. E. H. Twohig, E. J. Breitzman A. J. Pullen and F. S. Wiley, all of Fond du Lac, and Dr. J. W. Monsted, Sr., of New London.

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Dr. A. M. Rauch, Chilton, has become associated with Dr. J. F. Bennett and began his duties at Burlington in December. Dr. Rauch is a graduate of Marquette University Medical School and recently finished post graduate work in obstetrics at the New York Lying-in-Hospital, New York City.

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Dr. Reginal H. Jackson, Madison, was admitted to membership during December to the Southern Surgical organization at a meeting held at White Sulphur Springs, W. Va.

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Citing the case of a Dodge county woman who recently was fined $50 for leaving a quarantined home to attend a bridge party, the State Board of Health issued a warning to Wisconsin residents concerning observance of quarantine laws.

"Quarantine is imposed as a protection to the general public," the board commented. "To leave the quarantined premises violates the principle of public protection, since the public has come to rely upon the inviolateness of quarantine and feels safe so long as it is observed.

"In this case not only was a public's confidence violated, but a serious threat of further spread of diphtheria was given by the personal contact of the woman with a considerable group of well persons, all of whom thereby

were exposed to the diphtheria infection. In such cases severe penalty is amply justified."

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Dr. A. F. Stueck, Manitowoc, suffered from several fractured ribs, the loss of six teeth and severe cuts and bruises a few days after Christmas when he figured in an automobile collision on his return from a professional call.

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Dr. W. E. Bannen, La Crosse physician and regional director of the Boy Scouts of America, was one of the principal speakers at the annual regional meeting at the Edgewater Beach hotel, Chicago, on January 15th and 16th. He spoke on "Troop Organization Work in Area Councils."

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Dr. Malcolm M. Hipke, Milwaukee, left recently for New York City to take up special work in obstetrics and gynecology. Dr. Hipke has taken a position as assistant surgeon in the Lying-in-Hospital, of that city.

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Dr. Albert N. Tousignant, health commissioner of the former North Milwaukee, has been added to the Milwaukee health department staff as a school physician.

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Dr. Stuart A. McCormick, former prison physician at Waupun, and for the past two years a practicing physician at Almond, has opened offices at 21 N. Pinckney Street, Madison, for the practice of general medicine. Dr. McCormick is a graduate of the University of Wisconsin Medical School with the class of 1923 and of the Medical College of the University of Buffalo in 1926.

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Dr. Harry E. Burger, Beloit, has recovered from an illness that began in October, and started the new year by returning to his office in the Service building on January 2nd.

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Gov. Fred R. Zimmerman announced three appointments to the state board of medical examiners just before he retired from office. They are: Dr. John Guy, Milwaukee, to succeed Dr. Edith H. Stevens, Madison; Dr. Roy C. Rodecker, Holcombe, to succeed himself and Dr. J. Gurney Taylor, Milwaukee, to succeed himself.

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The Marshfield Clinic has engaged Dr. Allen L. Millerd, of New London, as a surgical assistant. This increases the clinic staff of physicians to fourteen.

Dr. Millerd is a graduate of the Medical School of the University of Wisconsin and Rush Medical College, Chicago, finishing his training at the last named school last year.

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For the first time in a long series of years in Wisconsin, cancer in 1927 showed a decline in death over the preceding year. In reporting this fact the State Board of Health expressed the hope that this "may mark the beginning of a continued decline in the death rate for cancer." Up to 1927 cancer had shown an annual increase without interruption.

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Fire originating in the x-ray room destroyed in part the annex to the Jackson Clinic, Madison, on Friday, January 4th. While x-ray films were destroyed, a complete compilation of the reports were on file with the case records in the main portion of the building which was not damaged by the fire. The clinic is contemplating either a complete remodeling of the building or possibly erecting a new structure.

For an indefinite time the offices of the clinic and the clinic physicians will be located on the first floor of the Methodist Hospital at Madison.

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A daughter, Elizabeth Ann, was born on January 9th to Mr. and Mrs. George Crownhart, secretary of the State Society.

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Dr. C. E. Smith was elected president of the Beloit physicians and Surgeons Club at the annual election of officers on Friday, January 4th. Dr. H. O. Delaney was named vice president and Dr. H. A. Raube was re-elected secretary-treasurer.

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Dr. O. C. Heyer has been appointed health commissioner of South Milwaukee to serve the unexpired term of Dr. Robert D. Moray, who in December was convicted of a manslaughter charge as the result of an illegal operation. The new commissioner will serve until April when the spring elections are held.

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Members of the Parent-Teachers' Association of Dudgeon School, Madison, heard Dr. J. E. Gonce of the Wisconsin General Hospital, give a talk on the "Prevention and Control of Contagious Diseases." Dr. Gonce concluded his talk by urging the parents to have their children inoculated against the most prevalent of contagious diseases.

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Dr. Clifford J. Stricker, a graduate of Northwestern University Medical School, arrived in Sturgeon Bay recently to assist Dr. G. R. Egeland in his practice in that community.

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Dr. A. M. Farrell, Two Rivers, addressed the Lions Club of that city during January. He based his talk on his observations on a recent trip to Jerusalem and points in Egypt.

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Dr. Charles Stuart Sheldon, Madison's oldest practicing physician, quietly celebrated his 87th birthday at his home on January 14th. The veteran physician received many telegrams and letters of appreciation. Unable to sit up and move about, the doctor spent his birthday in bed. Dr. Sheldon practiced medicine in Madison since 1884, and has always been active in community affairs.

—△—

Dr. M. G. Peterman, Milwaukee, addressed the January meeting of the Chicago Pediatric Society, held at the Medical and Dental Arts Club on January 15th. He spoke on "Suprarenal Insufficiency in Children."

—△—

Dr. I. D. Mishoff, Milwaukee, sailed from New York City on January 31st. He will spend one month in Europe and one month during the Easter Season in the Holy Land, returning May 10th.

Dr. John P. Koehler, Milwaukee commissioner of health, addressed an audience of deaf men and women recently at the Wisconsin Avenue social center. He gave a "talk" on coughs, colds and other respiratory ailments by means of a blackboard and pantomime and those who could not follow his lips and the blackboards read from printed copies of his address.

—△—

At the annual meeting of the staff of the Sheboygan Clinic held on January 8th, the following officers and directors were elected for the ensuing year: President, Dr. William H. Gunther; vice president, Dr. John Tasche; secretary, Dr. Harry H. Heiden; treasurer, Dr. G. H. Stannard; Board of Directors: The afore named officers and Drs. Otho H. Fiedler, A. E. Genter, William Van Zanten, John Zohlen, Otto Gunther, C. A. Squire and Conrad T. Tasche.

A general report of the business for last year was read, which report indicated favorable increases in all departments.

—△—

The Shearer Clinic of Edgerton has now been reestablished in the rebuilt Monarch Laboratory building from which the clinic was driven last August when fire destroyed the structure. The clinic facilities will be available to the public under conditions more attractive than before.

—△—

Dr. G. J. Hildebrand, formerly of Sheboygan but now of Albuquerque, N. M., has advised friends that his health has greatly improved.

—△—

Dr. A. A. Pleyte, a member of the staff of the Wisconsin Anti-Tuberculosis Association, spoke at exercises held for 132 graduates of the Wisconsin Telephone Company's health course. His subject was "The Place of Nutrition in Good Health."

MARRIAGES

Dr. Marcus Bossard, Waukesha, to Miss Pearl Hill, Spring Green, on December 11th at Sauk City.

Dr. Burton Clark, Jr., Oshkosh, to Miss Mary Elizabeth Harmount, Chillicothe, Ohio, on December 29th.

Dr. Alfred Goodsitt, Milwaukee, to Miss Sophie Frin, also of Milwaukee, on December 30th.

DEATHS

Dr. Hiram C. Johnson, Bruce, died at his home on Monday, December 10th, following an attack of pleurisy. Dr. Johnson was born at Sheboygan Falls, on August 20, 1875, and received a common school education, followed by a high school course at Fond du Lac. He received his M. D. degree at the Northwestern University Medical School in 1900 and was licensed in Wisconsin the same year.

At the time of his death Dr. Johnson was secretary of the Rusk County Medical Society, a position in which he had served for many years. He was also a member of the State Medical Society of Wisconsin and the American Medical Association. His wife survives him.

Dr. Charles William Stoelting, Oconto, died Saturday evening, December 15th, at the home of his niece in Manitowoc, following injuries received in an automobile collision. Dr. Stoelting, a practicing physician in Oconto since 1889, was a native of Indianapolis, Ind., born in that city in 1853. He was graduated from Rush Medical College, Chicago, in 1881, and practiced at Centerville, Kiel and Appleton before coming to Oconto.

For many years Dr. Stoelting was health commissioner in Oconto and at the time of his death was president of the Oconto County Medical Society, a member of the State Medical Society of Wisconsin and the American Medical Association. He is survived by his wife and two sons.

Dr. Max Staehle, Manitowoc, died at the Holy Family hospital, Tuesday evening, January 8th, after an acute attack of appendicitis. Dr. Staehl was sixty years of age. He was born at Manitowoc on June 10, 1869, graduated from the University of Illinois College of Medicine in 1900, and began his practice in Manitowoc immediately thereafter.

The deceased served in the medical corps during the world war and as health officer for the city of Manitowoc for the past eight years. He was a member of the Manitowoc Medical Society, the State Medical Society of Wisconsin and the American Medical Association. His wife survives him.

Dr. Richard J. Fleischer, Milwaukee, died Wednesday morning, January 16, at his home, after being stricken with a cold which brought on complications that caused his death. Dr. Fleischer was born in Germantown in 1863 and was graduated from Milwaukee Medical College in 1895. Surviving him are his wife, a son and a daughter.

Dr. Fleischer was a member of the Milwaukee County Medical Society, the State Society of Wisconsin and the American Medical Association.

Dr. Joseph W. Tarter, Iron River, died of pneumonia on Tuesday, January 15th. For weeks he had given liberally of his vitality in fighting the influenza epidemic in Iron River, Poplar and surrounding country until he himself fell a victim to the disease. Dr. Tarter was born in 1871 and was a graduate of the College of Physicians and Surgeons of Baltimore in 1895. He had practiced medicine at Iron River for the past thirty-four years.

The deceased was a member of the Ashland-Bayfield-Iron County Medical Society, the State Medical Society of Wisconsin and the American Medical Association.

Dr. B. J. Wadey, Belleville, died at his home from cerebral hemorrhage on Friday morning, January 11th. The doctor was born in the year 1874 and was a graduate of Rush Medical College in 1897. He is survived by his wife and a son.

Dr. Wadey was a member of the Dane Medical Society, the State Medical Society of Wisconsin and the American Medical Association.

Dr. James Dinsdale, Soldiers Grove, died at Madison on December 26th where he was receiving treatment for a leg infection. Dr. Dinsdale was born in Yorkshire, England, November 18, 1848, and came to America with

his parents a year later. He was graduated from Lawrence University in 1875 and from Rush Medical College in 1878. His wife and two daughters survive.

Dr. Edward M. McDonald, Beaver Dam, died at his home on Wednesday, December 19th, following a stroke of paralysis. The doctor was born at Utica, N. Y., on May 16, 1857, and was a graduate of Rush Medical College in 1883. He is survived by his wife, a son and a daughter.

Dr. M. H. Rosenheimer, Milwaukee, died on December 23rd. The doctor had been in ill health for about a year. He was born in 1863 and was a graduate of Bellevue Hospital Medical College of New York in 1884. His wife and two sons survive.

Dr. G. C. Hoyer, Appleton, died Thursday morning, January 17th, after an illness of about two weeks. Dr. Hoyer was born in Hamburg, Germany, in 1860, and was graduated from Rush Medical College, Chicago, in 1882. The doctor practiced medicine at Princeton for seventeen years, moving from there to Milwaukee where he was engaged in his practice until retirement about seven years ago. He then moved to Appleton and devoted all his time to work as medical director of the Lutheran Aid Association.

Dr. Hoyer was a member of the Outagamie County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. He is survived by his wife, a son and a daughter.

Dr. Horace Manchester Brown, Milwaukee, died Friday evening, January 18th, following a heart attack from which he suffered about two weeks ago. Dr. Brown was one of a family of numerous physicians and scientists in preceding generations. He was a direct descendant of the Mayflower stock and was born in New Bedford, Mass., in 1858. He received his doctor's degree from the University of the City of New York in 1880, and then took advanced studies in Paris, Brussels and Berlin.

For several years Dr. Brown was engaged in scientific work of a commercial nature in Central America. He returned to the United States in 1883 and came to Milwaukee where he established his practice. Dr. Brown was versatile. He was adept at sculptoring; he was a linguist and a connoisseur of literature and antiques.

The deceased was a member of the Milwaukee County Medical Society, the State Medical Society of Wisconsin, the American Medical Association and the Milwaukee Academy of Medicine. He served as delegate for Wisconsin to the American Medical Association for a number of years. Dr. Brown was a fellow of the American College of Surgeons and belonged to the Association of Military Surgeons of the United States and the Medical Library Association. From 1890 until 1916 he operated the old Lakeside Hospital, and for forty-one years was surgeon for the Milwaukee railroad. Since 1919 he had been a member of the staff at Columbia Hospital. His wife survives him.

SOCIETY RECORDS

New Members

Eberbach, C. W., 120 E. Wisconsin Ave., Milwaukee.
Portman, R. J., 721½ 5th Ave., Antigo.
Bennett, W. H., 1208 56th St., Kenosha.
Hansberry, P. H., Hillsboro.
Weiland, H. P., Verona.
Munger, D. C., Ellsworth.
Burger, H. E., Beloit.
Reynolds, Bertha, Lone Rock.
Juers, R. H., Marshfield.

Changes in Address

Riordan, J. F., Berlin, to Public Service Bldg., Kenosha.
McCormick, S. A., Almond, to 21 No. Pinckney St., Madison.
Ruppenthal, K. P., West Salem, to Bangor.

CORRESPONDENCE

PLEASED WITH IMPROVEMENT

Fort Atkinson General Hospital
Fort Atkinson, Wisconsin

January 10th, 1929.

Mr. J. G. Crownhart,
The Wisconsin Medical Journal,
Madison, Wisconsin.

Dear Sir:

I am very much pleased with the improvement in the Journal in the last five years. The information that it contains is of great value to the profession. I also am impressed with the high class of advertising that it is getting. That is always a good index as to the nature of the publication, or rather as to what the business world thinks of it.

Most sincerely,
P. J. Majerus, M. D.

APPRECIATION

La Crosse, Wis., January 7, 1929.

My dear Mr. Crownhart:

I am not quite sure whom to address in thanking the Council of the State Medical Society for the beautiful dark red roses sent to Dr. Evans New Year's Day. He has been and still is enjoying them.

May I make this another case of "Let George do it" and ask you to convey to the Council and Society our appreciation of the sympathy and affection of the various members shown to Dr. Evans through his very severe illness?

I am very happy to tell you we now look forward to his complete recovery in time.

Gratefully yours and wishing you all a Happy New Year,

Sarah T. Evans.

MALPRACTICE SUITS

American Medical Association
Bureau of Legal Medicine and Legislation

Chicago, January 10, 1929.

Mr. J. G. Crownhart, Executive Secretary,
State Medical Society of Wisconsin,
Madison, Wisconsin.

Dear Mr. Crownhart:

I thank you for the reprints of your article on "Malpractice Suits: Their Prevention." If the physicians of Wisconsin will read, digest, and assimilate what you have

written, the number of malpractice suits in the state ought to diminish, and the number of successful suits ought to diminish in even greater proportion.

Sincerely yours,

WM. C. WOODWARD, *Director.*

FROM THE TREASURER EMERITUS

Minneapolis, Minn., January 11, 1929.

George Crownhart,
State Medical Society of Wisconsin,
Madison, Wisconsin.

Dear George:

Please extend my hearty thanks to the Council for its hearty greeting. It is like water to a thirsty horse to me.

A long drawn-out cold with a sore throat has kept me rather quiet most of the time since I saw you, but I am improving.

Best personal regards to the members.

SIDNEY S. HALL.

IMPORTANT QUESTIONNAIRE

American Medical Association
Bureau of Health and Public Instruction
Chicago, January 5, 1929.

Mr. J. G. Crownhart, Secretary,
State Medical Society of Wisconsin,
Madison, Wisconsin.

Dear Mr. Crownhart:

As you receive this letter, the questionnaires on The Capital Investment in Medicine will be ready to leave the headquarters of the American Medical Association. A very important group, composed of economists, publicists, physicians and others, has undertaken to make an investigation of the cost of medical care, the results of which will be of great importance to the medical profession. The American Medical Association has undertaken to collect information pertaining to the capital investment in medicine and the income from medical practice.

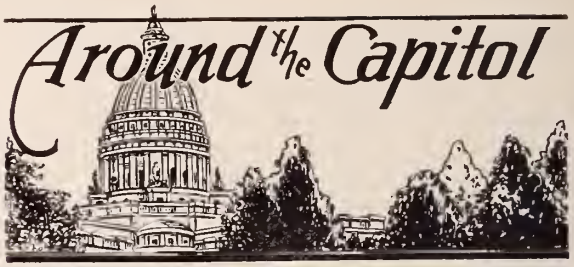
As a part of the work of the above-mentioned group, known as The Committee on the Cost of Medical Care, the American Medical Association is to request more than 25,000 physicians, selected at random, to furnish certain data pertaining to the invested capital involved in physicians' education, intern training, post-graduate courses, office and traveling equipment, office maintenance, medical society affiliations, library maintenance and medical licensure fees.

This, as you will realize, is a survey of the profession, by the profession, and for the benefit of the profession. The questionnaire is to be anonymous and, therefore, there need be no fear of any embarrassing or undesirable results from the information returned.

You are urged to encourage, among the members of your state society, a serious and thoughtful consideration of this matter to the end that complete and reliable data will be given on the several items. We desire that you suggest, through your medical journal, by news item, editorial and other appropriate means, the importance of this survey and the desirability of universal participation on the part of the physicians who receive the questionnaire.

Yours very sincerely,

R. G. LELAND, M. D.,
Director of Study.



Important changes in the state administrative boards and commissions are proposed in several bills, which have already been offered at the biennial session of the Wisconsin legislature now in session at the capitol. Most of these bills leave the state Board of Health as it is now created, but provide for the consolidation of much of the work performed by unimportant boards, with constitutional departments.

Governor Walter J. Kohler in his message to the legislature favored a centralization of the administrative work of the state more directly under the supervision of the executive department. He recommended a budget system for the handling of the state's finances. The latter proposal is meeting with favor.

* * *

It now seems probable that a new highway law will be enacted at this session of the legislature. The state is supervising the expenditure of about $20,000,000 annually on roads. It is proposed to create a salaried state highway commission of three members to handle this important problem.

A number of independent bills will be offered affecting the highway and automobiles. By some it is proposed to have a four cent gas tax. This idea is meeting with some opposition. Others proposed to reduce the auto license fee to $8 a year. It is possible if the gas tax is increased that the license fee will be reduced to a flat rate for all cars.

* * *

Governor Walter J. Kohler has appointed F. X. Ritger, University of Wisconsin purchasing agent, as state superintendent of public property, succeeding G. B. Ballard. The change in officers became effective last week. Mr. Ritger has been connected with the university since 1911 and was one of the men who worked out the present university budget system. He served as an officer during the war and now holds a commission as lieutenant colonel in the Wisconsin National Guard.

* * *

With 10 years passing since the signing of the armistice, Wisconsin hospitals together with the institutions of the rest of the country, are continuing to record the results of the World war.

The Wisconsin Memorial hospital at Farwell's point on Lake Mendota, dedicated to the treatment of human wreckage of the war, still has 278 patients with new cases directly traceable to the great conflict coming to light practically every day. The one state hospital by no means holds all of the victims of the war in the state.

* * *

Attributing much of the increase in milk consumption to the fact that workmen are drinking it since they have been deprived of beer, R. W. Dixon, state prohibi-

tion director, declared that he believed that Wisconsin dairy farmers knew on which side their bread was buttered and that they did not want the return of the foamy brew. Commissioner Dixon points out that milk production in Wisconsin has increased since 1921 together with the price paid with farmers getting 50 percent more revenue from the white fluid now than they did eight years ago.

* * *

Wisconsin and its counties are spending yearly $1,000,000 in the care of tubercular patients. These are cared for in 17 public hospitals located in various parts of the state. This number does not include those patients in the private, semi-private or federal hospitals. The state maintains a sanitarium at Wales and a convalescent camp at Tomahawk Lake.

* * *

A hunter who killed a wolf without a hunting license gets 40 days in jail and at the same time the state pays him $30 according to an opinion by the attorney general to the state conservation director. The man came to claim his bounty and was found not to have a hunting license. He was sentenced to 40 days in jail. The attorney general advised, however, that the state must pay the bounty for the animal.

* * *

John T. Donaghey, former state highway engineer, has gone on record here as opposed to a too rapid road building program for the state. Mr. Donahey declared that he favors the pay-as-you-go plan that has been followed by the state. When big bond issues are floated for road building it leads to waste he says. Where millions are provided for new roads the highway officers are out to spend the money, tearing out old road bases rather than using them for the new surfacing, he declared. He adds that the people who claim it is cheaper to have concrete roads than less modern highways are wrong in many instances. A concrete road lasts but 25 years at most, he says, and is usually built with a bond issue. With depreciation, interest and maintenance it costs about $3,000 a year to own a mile of concrete pavement, he said.

* * *

With an average numerical grade ranging from one to four points higher than the average university grade, five outstanding athletes in each major sport at the state university over a period of six years were the classroom superiors of their average academic brother, according to a statistical survey made by a student in the school of commerce under the direction of Prof. P. G. Fox.

Highest scholastic success among the athletes studied was achieved by a track man who maintained an average grade of 90 for three years. The nearest high record to this was that of a baseball captain who had an average grade of 91 for one year.

* * *

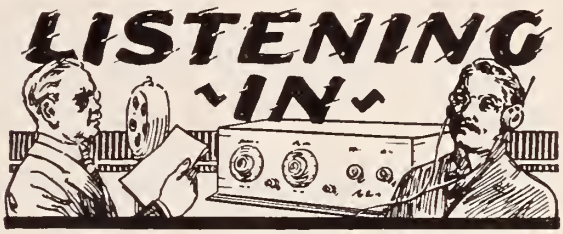
Soda used in cranberries destroys vitamins, university authorities have found. Soda softens the skins and removes the bitter taste, and yet not one of the recipes included in "Cranberries in the Diet" a circular recently issued by the Wisconsin College of Agriculture contains soda.

The reason is that those who have been making experimental studies have found that vitamin C, the scurvy-preventing vitamin, is destroyed by soda, according to Miss Abby L. Marlatt, one of the authors of the bulletin and director of the home economics department at the college. Even vitamin B, which helps prevent diseases and promotes growth, may be affected by soda.

* * *

The University of Wisconsin ranks highest this year among universities and colleges of the country in the number of persons enrolled in extension courses, and eighth in number of regular full-time students, according to figures in a report compiled by Dean Raymond Walters of Swarthmore college for the magazine, School and Society.

The growing demand for liver as a human food has greatly increased the states cost of raising fish. The state used to buy liver for fish food at 10 cents a pound. Liver forms the chief food at the various fish hatcheries. Now the cost of liver fed to fish is about twice that sum. Fish are also being grown to a larger size than formerly before being turned loose and this also adds to the feeding costs.



BLUE BOOKS

Announcement was made last month that the 1929 Blue Books would be mailed the first week in January. Due to an unforeseen delay, the Blue Books were not in the mails until the 14th. As result the Secretary was called upon by members in all parts of the state who advised him that their copy had not been received and asked that a duplicate be forwarded. While the delay was unfortunate, it was interesting to note the large number of members who wrote immediately when their copy was not received.

Oregon is the first state to follow the lead of Wisconsin in this venture with their first Blue Book issued this year.

REDUNDANCY?

Following the letter to the members the first week in January outlining certain legislative work of the Society, more than one member suggested that the letter might have been considerably shortened without losing any of the thoughts meant to be conveyed.

Experience has taught the Committee on Public Policy, however, that it must word every letter pertaining to legislation with the utmost care and leave nothing to be understood. In the past it has occurred that cultists have obtained such letters and by picking out one phrase, given publicity to a thought that was entirely contrary to the spirit of the letter. As in politics, officers of the State Society must write every letter to members with the thought that such letters will be published. They will be if there is anything in them that cultists can use or turn to their advantage.

1929 RESOLUTIONS

After reading the letter to members referred to above, one member suggested the following resolutions for your Secretary:

1. I will properly observe and use rules of grammar, including some English and grammar.
2. I will cut down the number of drinks and increase the hours of bed-riding sufficiently to insure smooth ideation each day.
3. I will receive members dues the last of the year if I cannot get them before.
4. I will run the State Society so that the members may slumber on undisturbed.
5. I will work hard twenty-six hours of each day and the rest of the time I will devote to my wife.

Surely this should set at rest any doubts that letters are read.

AMERICAN MEDICAL LIBERTY LEAGUE

Elsewhere in this issue the reader will see a copy of letter sent to all members of the legislature by the secretary of the society listed above. This is probably but the first of a series of letters that legislators will receive from the cultists, the anti-vaccinationists, the anti-vivisectionists and others "antis" in general. Read the letter reproduced in this issue and you will appreciate why the Committee on Public Policy regards it so important that individual members acquaint their members of the legislature with the necessity for proper legislation in the interest of the public health.

MEDICAL ECONOMICS

Following the recent publication of the article on prevention of malpractice suits, the Dane County Medical Society devoted a large part of its subsequent meeting to a discussion of this and allied problems. In this issue appears the first of a series on Collection Problems and in January an article appeared on Collection Agencies. Information contained in some of these articles has taken years of experience to secure. The Editorial Board believes that you will find them well worth the time spent in the reading.

SERVICE TO MEMBERS

Every week brings calls for some unusual type of service that the State Society is glad to render its members without charge. Recently a member wrote that his sister was ill in Washington, D. C., and was without knowledge as to a reliable clinic for a thorough physical examination. A wire to a personal friend, an official of the American Medical Association, brought the information that there was no clinic in Washington, suggesting the name of a prominent physician of unquestioned standing who specialized in the diagnostic field. The member had the information he requested in forty-eight hours.

Legislature Opens Sessions; Important Committees Affecting Health Legislation Announced in Senate and Assembly

Bills were being introduced slowly at the close of the third week of the legislative session but reports from the drafting room indicates that by the end of the first week in February there will be many bills introduced affecting public health questions. The committees in both houses that will pass upon legislation suggested by the State Society follow:

Education and Public Welfare of the Senate
(All bills relating to public health)

Senator Walter S. Goodland, *Racine,* Chairman, and Senators Bernhard Gettelman, 1466-26th Street, *Milwaukee;* Howard Teasdale, *Sparta;* Walter H. Hunt, *River Falls;* and Peter J. Smith, *Eau Claire.*

Public Welfare of the Assembly
(All bills relating to public health)

Assemblyman Harry E. Stephens, *Platteville,* Chairman and Assemblymen E. G. Smith, *Beloit;* Mary Kryszak, 783-6th Ave., *Milwaukee;* E. M. Rowlands, *Cambria;* John Mulder, *LaCrosse;* A. J. McDowell, *Soldiers Grove;* and Fred W. Springer, 1163-2nd Street, *Milwaukee.*

These two committees will pass upon all measures affecting public health or treating the sick with the sole exception of the proposed measure to repeal the state permit fee for physicians under the state prohibition act. This measure, when introduced, will come before the Senate and Assembly Committees on State Affairs. These committees follow:

Senate Committee on State and Local Government: Senator Merritt F. White, *Winneconne,* Chairman and Senators William Markham, *Horicon;* James Barker, *Antigo;* Elmer Hall, *Green Bay;* and A. M. Miller, R. 1, *Little Chute.*

Assembly Committee on State Affairs:

Assemblyman P. E. Nelson, *Maple,* Chairman and Assemblymen Charles A. Budlong, *Marinette;* William A. Meyer, *Oshkosh;* Earl D. Hall, *Tunnel City;* Evan G. Davies, *Waukesha;* Thomas Conway, 776 Jackson St., *Milwaukee;* Dell Penniston, *Argyle;* A. J. Chmurski, 1033 Grant St., *Milwaukee;* L. L. Thayer, *Birchwood;* Arthur A. Hitt, *Alma* and Albert F. Woller, 1627-17th St., *Milwaukee.*

The Committee on Public Policy of the State Society will forward members a bulletin listing measures introduced with their official titles and numbers early in February.

American Medical Liberty League Writes Members of Legislature

On the first of the year all members of the Wisconsin Legislature received a mimeographed letter from a Mrs. Lora C. Little, Chicago, Secretary of the American Medical Liberty League. The letter, reproduced herein, urged the legislators to oppose legislation suggested by the American Medical Association. Enclosed with the letter was a 66 page pamphlet on "Doings of Doc-

TELEPHONE HARRISON 4283

American Medical Liberty League, Inc.

A CITIZENS' MOVEMENT FOR MEDICAL LIBERTY
ON THE SAME BASIS AS RELIGIOUS LIBERTY

Endorsing the Principles and Aims of the Anti-Vivisection Societies

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G. R. Dietze, S. Dak.
G. E. McGlaun, Tex.
W. H. Pyall, Utah
A. S. Haskins, Vt
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H. J. Michaels, Wis.
Flora A. McCue, W Va.
F. P. Millard, Can.
Mrs. Otto H. Swezey, Hawaii

SECRETARY
MRS. LORA C. W. LITTLE
59 E.VAN BUREN STREET, CHICAGO, ILLINOIS

December 31, 1928.

Dear Sir:

Along with my best wishes for the holiday season & the New Year I beg to hang on the Christmas tree of one of Wisconsin's honored lawmakers, for perusal by the first days of 1929, a little book by a medical man of international reputation, entitled, "DOINGS OF DOCTORS."

Dr. White's observations & experience in connection with medically wrecked men, women & children, is duplicated (to the extent of his practice) in the office of many a practitioner who employs natural methods of relief & cure.

Where Dr. White stands out, he refuses to be cowed into silence by the powerful medical trust. He believes, with the American Medical Liberty League, that exposure of the malpractices that are today the rule rather than the exception, MUST BE MADE, IN ORDER THAT CITIZENS MAY THROW OFF THE YOKE OF THIS MURDEROUS RULE.

You will be asked by representatives of the American Medical Association, and of their little brothers, the American Veterinary Association, during the coming session, to vote the people's money into the hands of the class whose "DOINGS" are set down by Dr. White.

You will no doubt be called upon by them to strengthen their rule over the people of your State.

Before you do either of these things, you are invited--nay, urged--to read this little book. Should it look formidable to a busy man, just glance over the Table of Contents, pick a case or two that most interest you, read them. The rest will be easy.

Trusting that you are going to the Capitol to stand up for the personal rights of the citizen against this privileged but professionally inefficient class, that you will cut off & cut down the medical appropriations, & that you will sternly refuse to vote for any & every bill aimed to tighten the medical monopoly. I am

Yours very truly,

LORA C. W. LITTLE, Secretary

tors" written by one George Starr White, M. D., "F. R. S. A., London" whose address is given as Los Angeles, California.

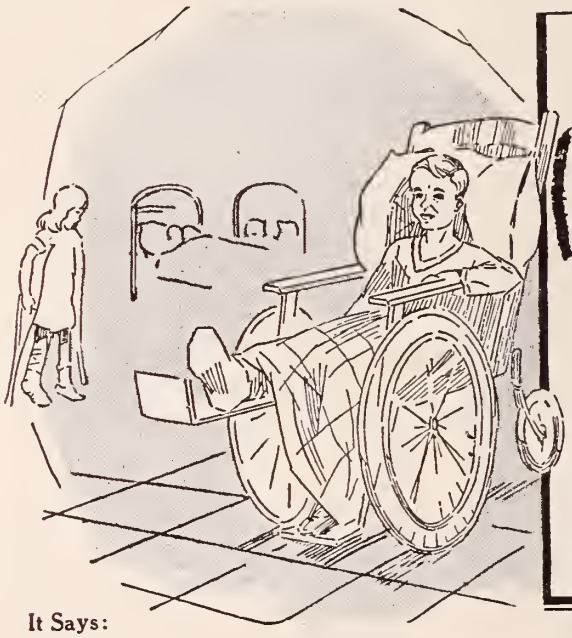
The letter is probably a preliminary step towards the introduction of measures in the interests of the cultists and possibly aimed to prevent vivisection, and limit vaccination and quarantine methods. One H. J. Michaels is listed as the

Crippled Children Bled for Serum Like Horses.

Doctors Take Blood Like South Sea Cannibals—And Advertise It.

ISSUED TWICE-A-WEEK
LOS ANGELES DOWN TOWN
MIDWEEK
Shopping News
MONDAY AND THURSDAY
GUARANTEED VALUES
TRUTHFUL ADVERTISING
VOL. XIX, NO. 9 LOS ANGELES, CALIF., THURSDAY, OCTOBER 27, 1927

Give One Day's Pay to Community Chest



AT THE Orthopedic Hospital warped and crippled limbs of little children are strengthened and straightened and they are enabled to begin life's fight on even terms.

These little tots can not give money to charity but they smilingly give their blood which is made into a serum to prevent infantile paralysis in other children.

The Orthopedic Hospital is one of the 150 charitable and welfare agencies supported by Community Chest, which makes one systematic and economic appeal yearly.

The fortitude and sacrifice of those crippled kiddies is a challenge to you. You are not asked to give as they give, but you are asked to give of your time and money in the campaign beginning October 31.

Give more this year and give with a smile—like those crippled kiddies in hospital cots.

It Says:

"These little tots can not give money to charity but they smilingly give their blood which is made into a serum to prevent infantile paralysis in other children."

Not alone in Los Angeles, but in hospitals all over the Country sick children are being robbed of their life blood! Being treated as heartlessly as the vivisectors treat dumb brutes.

(See W. A. Evans, Chicago Tribune, Nov. 3, 1927)

WOULD YOU STOP IT?

Join the American Medical Liberty League! Make these horrors known. Get the ear of lawmakers by getting the ear of the voter.

Send in your dues $5.00 now. We send you our paper and free literature.

AMERICAN MEDICAL LIBERTY LEAGUE, Inc., 59 East Van Buren Street, Chicago, Ill.

Printed in U. S. A.

Vice President of the League for Wisconsin. While no address is given, a H. J. Michaels is a chiropractor in this state.

The pamphlet enclosed with the letter is composed of a series of "case reports" with such titles as "Spinal Punctures—Dead Child", "Killed to Cure a Pimple," "Black Smallpox Hocus-Pocus", "Why Trust Doctors Control Hospitals", "Healthy Child Dies of School Inspection", "Smallpox Scares Built to Sell Vaccines", "Depraved Work of Doctors in High Standing", etc.

The American Medical Liberty League was exposed in the J. A. M. A., 1922 in which article it was stated that White was previously a second vice-president of the Allied Medical Associations in 1918. He graduated in 1908 from New York Homeopathic at the age of 42 and has been at times an advocate of "spondylotherapy" "zone therapy", and of "Bio-Dynamo-Chromatic-Diagnosis". The J. A. M. A. declared that the letters F. S. Sc., London, used in 1922 "carry with them an air of erudition and mystery that is well worth what they cost. They mean 'Fellow of the Incorporated Society of Science, Letters and Arts of London, Ltd.' The 'Fellowship' is held by not a few 'patent medicine' exploiters in the United States. It costs one guinea ($5)".

White was expelled from the Los Angeles County Medical Association in 1916 following his conviction in 1915 of practicing medicine without a license in Chicago.

Mrs. Little was at one time a traveling lecturer "whose business it was to create sentiment against vaccination", declares the J. A. M. A.

Making It Easier to Collect the Doctor's Bills

Just Why Are Doctor's Bills Hard to Collect and What May Be Done About It?

By ROBERT R. AURNER, A. M., Ph. D.
Professor, Department of Business Administration, School of Commerce
University of Wisconsin, Madison

FOR six years, Prof. R. R. Aurner has been a member of the faculty of the School of Commerce of the University of Wisconsin. During that time he has made a special study of the collection problem as it applies to physicians and the Wisconsin Medical Journal feels that it is indeed fortunate to have the opportunity of presenting this series of articles of which this is the first.

Prof. Aurner is a member of the Speakers' Bureau of the International Advertising Association, has been a special lecturer at the Universities of Iowa and Illinois, and at Wisconsin was co-director in 1927 and 1928 of the courses in merchandising and advertising. In 1927 he wrote the prize-winning advertising for national honors and first prize at the National Association of Real Estate Boards. Prof. Aurner is the author of Effective Letter Bulletins, 1928, and the co-author of Effective Business Letters, 1928. During January, February and March, 1929, he is broadcasting over WTMJ, Milwaukee, at 6:45 every Wednesday evening a series of lectures on Better Business English.—Editor's Note.

Why is it that the doctor's bills are so much harder than the average to collect?

The answer to the question is fairly complex. The whole difficulty arises because it is impracticable for a professional man in general and the doctor in particular to demand cash in advance, or even to deal on cash terms. This makes necessary the use of credit; and as soon as credit comes into the picture, you can be sure that it will drag Mr. Collection Procedure right along with it.

There can be no question but that the doctor labors at a disadvantage in collecting debts. Certain factors are peculiar to his collection situation.

First, he is a professional man and not a business man, and he is hedged about with an etiquette which makes it inadvisable for him to use precisely the collection methods of the business man. Sometimes, indeed, he interprets professional etiquette as debarring him from using any real collection methods whatever. Tradition, precedent, and the ethics of the profession have combined to discourage any vigorous attempts at collecting money owed. The doctor has been expected to minister unto mankind, to serve charitably, and not to grasp for payment.

Second, the doctor's relation with his patients is a personal one. As a consequence he feels hesitant about approaching them directly for payment.

Third, he is selling not a tangible commodity but an intangible service; a service which different people may interpret variously and on which widely differing values may be placed. Five or six months after a patient has been brought back to health, the estimate which he puts on the services of his doctor is likely to be pretty low.

Fourth, a doctor is not in a position to choose for his customers only those who are good credit risks. He is obligated professionally to render his services to anyone in need of them. Since he cannot select his prospects, it is never within his power to extend credit wisely. He is forced to ex-

tend credit whether it is wise or not; there is no choice about it.

Fifth, the doctor is prone to entertain the feeling that it is hardly decent to press for payment at any time; and under no circumstances until the patient has recovered. As will be seen in a moment this is in one sense a leading reason for delinquency in the payment of medical bills.

Sixth, the doctor deals with "unbusinesslike" people. When this statement is analyzed, it is found to mean that he is dealing with people who are not accustomed to business procedure, to business obligations, to business self-interest. Their unbusinesslike outlook comes first from lack of education as to the meaning of the credit obligation, and second from lack of any feeling of self-interest in liquidating the debt.

Seventh, the doctor is forced to fight a fundamentally adverse condition. It is almost a national habit to postpone the doctor's bill.

Eighth, the bill as finally rendered is sometimes for a lump sum of considerable size which the patient realizes at once he will be unable to settle in full at the moment of presentation. This leads to a delay on the whole sum which, from the standpoint of strategy, is most damaging to the doctor's case.

Here, then, are eight major factors peculiar to the doctor's collection situation. Let us study each one more critically. And with a view to formulating an answer to the questions, why are the doctor's bills harder than the average to collect? and what may be done about it? let us expand each point more fully as we proceed.

It is unfortunate that medical ethics have in the past been so often interpreted as debarring the doctor from employing any real collection methods. Many just fees have been lost through an oversensitiveness on this point. It may be said that professional etiquette has been maintained at the expense of efficient collection; and often in those directions, too, in which efficient collection would in no sense have infringed upon the strictest professional etiquette. From my contact with a number of clinics in the middle west, it has been my observation that a slow swing is developing in favor of a more intelligent application of collection pressure and a more systematic follow up of medical accounts. Nor has it been found that professional ethics is in any degree impaired.

It is true that the sometimes embarrassing personal relationship of the doctor with his patient is nicely avoided by the clinic system of management. And yet the personal relationship of the doctor with his patient may be interpreted as a distinct advantage as well as a disadvantage. Wherever a personal relationship exists, there, also, is confidence; and where a personal confidence is established, the obligation to pay is harder to forget. Without seeming to press his patient overmuch in later stages of collection, the doctor may briefly call attention to the personal nature of the services rendered and the instant willingness with which they were given. The patient inevitably reacts best to the good will, golden rule, fair play note.

If we reduce a collection situation to its basic elements, we find that it involves something like the following facts:

1. A man conceives a desire for an article or a service.
2. His desire to have the article or service outweighs his desire to hang on to his hard-earned income (in this case, credit).
3. He purchases the article or the service on credit.
4. The bill becomes due.
5. He either pays it, or delays indefinitely in paying it, or never pays it at all.

Our problem in the case of the medical account differs in only one important particular. The patient did not wish to get sick. The idea of going to the doctor is at first distasteful to him. In all too many cases he unwisely puts off the visit. Reluctance to go to the doctor's office is reinforced by reluctance to incur the doctor's bill. Nevertheless, at the time he enters the doctor's office, he knows more vividly than he will at any later time that he is going to have to pay something for the treatment which he will receive. From the ideal collection standpoint the time to approach a patient about his bill is not after he is out from under the doctor's care and has completely recovered his health but while he is still undergoing treatment and has a vivid impression of the hundred and one things that are being done for him, and when it is a dozen times easier to educate him to the tangible credit obligation he has incurred.

WHAT THE MERCANTILE CREDIT MANAGER WILL TELL YOU

The experienced collection manager in a business establishment will tell you that the longer an account runs the harder it is to collect. There is

PROF. R. R. AURNER

a reason for this. The sense of value received fades into the background of the patient's mind with the passing of time; finally there is nothing left but the unhappy realization that payment still hangs over him. To none of us is there any stimulus in merely settling a debt. When it is hard to see or to remember what it is we are paying for, we become increasingly reluctant to relinquish our money. Whenever a patient is discharged from medical care with his bill unpaid—this is of course predominantly the case—and especially where the unpaid bill is allowed to remain so for any length of time, the necessity will arise for repainting in the patient's mind as vividly as possible, the services that were rendered to him in the time of his great need. Otherwise he will forget; and, forgetting, he will not want to pay.

The experienced collection manager in a business house will also make this point: "Credits are nine-tenths of collections." In medical treatment, however, it will always be true that patients must be taken as they come. Hopeless credit risks must be assumed along with those who are the most honorable in prompt payment. Of course the mercantile collection manager does not mean that he extends credit only to good risks, nor does he mean that he extends credit only to those who are in the best possible situation to pay. He prides himself rather on his ability to get money promptly from customers whom other merchants have difficulty in collecting from at all. The secret of his success is this: he establishes with his customer, just as it would be wise for the doctor to establish with his patient, so complete an understanding of the value of the services received and of the method of payment, that it will be easy to revive his memory of the understanding and, on the basis of that agreement, to bring about a relatively easy collection.

THE IMPORTANCE OF RE-SALE

From the practical standpoint collection is resale, which means reëstablishing so far as possible the mental attitude of the customer at the time of the original purchase. Unless the customer was at that moment dishonest, he felt in his own mind a willingness to part with his money for the service he was getting. If the unpleasant visual image of paying can be submerged under a series of constructive images of the care the patient has received, the collector's efforts will be more successful. The key to results will be found in keeping such close contact at all times with the patient that the memory of value received and obligation incurred never fades from his mind. To be successful, collections must be prompt, regular, and systematic.

The question is sometimes raised, as it was in a recent Milwaukee convention, as to why so much effort should be expended after all to collect doctor's bills. Why should doctors not render these services to the community gratis all of the way instead of only for the charity percentage of their work? The answer of course is that doctors cannot exist, and the community must be deprived of their profession, if they are not to collect their money. This argument, kept in the forefront of the patient's mind in collection messages, has proved effective.

The question is also raised as to whether a doctor should collect all of his outstanding bills? The answer must be no. The millenium of one hundred per cent collections will never arrive; and it is doubtful if it should be wished for. Yet if there is to be any backbone in a medical collection system, every cent of the regular charge which it does not collect should be definitely remitted by the doctor as the result, not of a failure to collect, but of a clear understanding and a friendly adjustment.

No true analogy can be drawn between mer-

cantile collections and medical collections. We see that the retail purchaser pays in order to escape the annoyance of being dunned, and in order not to have his credit with the merchants cut off. A man who buys an order of groceries pays his bill in order that he may maintain for himself the privilege of buying his groceries next month on credit. A man pays his electric light bill in order to avoid living in the dark when night comes on. The merchant, in turn, pays his wholesalers in order to be able to secure more goods with which to carry on his business. But no doctor would dare to close his office doors on an emergency case, merely because the patient did not pay his former bill. The same weapon is not available. The patient cannot be made to realize in just the same way that he must pay the doctor in order to obtain his services again in time of need.

THE TRADITIONS OF THE PROFESSION

A large part of the difficulty which the doctor has with many of his outstanding accounts is owing to the fundamentally adverse conditions which he finds himself forced to fight. For many years there has been the tradition that the medical profession can wait, that payment can be indefinitely postponed as if it were a matter purely of individual choice. It would not, perhaps, be too difficult even today to overhear doctors saying to their patients at the time of their discharge from treatment, "Oh, don't bother about the payment. Just pay when you get ready." Naturally patients have followed this liberal and pleasing suggestion. When the full weight of such a tradition oppresses the medical profession, it is bound to jeopardize certain phases of the business end.

The lump sum bill of perhaps unexpected size, making it impossible for the patient to settle in full at once, is often used as an excuse for delay; yet such an excuse is easily countered by offering the installment method. It should, however, be an installment method based not upon vague figures, but upon a clearly understood agreement of systematic payments at specified intervals.

A QUICK REVIEW OF WHY THE DOCTOR'S BILLS ARE HARD TO COLLECT

I. First task: to find the common factors in collection experience. Human beings are governed by the same essential psychology, and possess the same basic feelings. Appeals to pride and shame, fear and good-will are equally effective in Madison, Milwaukee or Massachusetts.

II. Recognizing and identifying the state of mind of the patient and of the doctor before and after the patient becomes a debtor.

a) The doctor: hedged around by medical traditions which have in the past hampered him from taking active steps in collecting bills in the commercial sense of the term. This has had its profound effect upon the attitude of all medical administration.

Neither doctor nor medical organization can choose for themselves only customers who are good credit risks. Both are obliged professionally to render services to everyone in need.

Both doctor and hospital deal with people who, most of them, have never been educated to the true significance of the credit obligation. And both doctor and hospital are fighting against an old idea that has grown up so powerfully; a tradition which says that doctors' bills may be postponed indefinitely.

b) The patient: after the doctor has rendered his service and the patient has become well, he forgets the value received because it fades rapidly and recedes from his memory. Nothing seems so fleeting as what was done in illness, when the patient is well. He knows simply that he is back to normal, and can see nothing tangible to pay for unless a close contact is maintained with him and his memory is kept vivid as to what the doctor did for him.

III. The immense importance of re-sale: Re-sale is the process of reviving in the patient's mind the value of the services that were originally rendered to him, the true significance of which may have completely left his mind. Re-sale involves also in some cases a rather extensive education in credit obligation. "You asked us for this service—it is now only fair that you pay for the scientific care you received."

COMMANDING PREFERRED ATTENTION FOR THE DOCTOR'S BILLS

Continuing the general subject of this series of articles, I shall hope in a succeeding article to indicate how it is possible to command preferred

attention for the doctor's bill, and to show how mercantile collection procedure may be applied to the medical man's outstanding accounts without overstepping the bounds of professional ethics.

Council; Minutes of Meeting Held at Milwaukee During January

The Council of the State Medical Society met at the University Club, Milwaukee at 9:30 a. m., January 5, 1929.

1. Dr. K. W. Doege, president of the State Medical Society presided in the absence of Dr. Edward Evans, La Crosse. Roll call showed the following present: Councilors A. W. Rogers, Oconomowoc; F. W. Pope, Racine; C. A. Harper, Madison; Wilson Cunningham, Platteville; T. J. Redelings, Marinette; J. F. Smith, Wausau; H. M. Stang, Eau Claire; J. M. Dodd, Ashland; R. W. Blumenthal, Milwaukee; President K. W. Doege, Marshfield; Treasurer Rock Sleyster, Wauwatosa, Speaker of the House H. P. Greeley, Madison; President-Elect F. J. Gaenslen, Milwaukee; members of the Editorial Board, Oscar Lotz and H. E. Dearholt, Milwaukee; chairman of the Committee on Public Policy, Otho Fiedler, Sheboygan, and the secretary. Absent: Drs. J. L. Shaw, Manitowoc; F. Gregory Connell, Oshkosh, (ill) and Edward Evans, La Crosse (ill).

2. It was moved by Dr. Blumenthal, seconded by Dr. Harper, that the minutes of the Council meetings during September, 1928, be approved. Carried.

3. Election of the chairman of the Council to succeed Dr. Edward Evans, La Crosse. Dr. A. W. Rogers was nominated by Dr. H. M. Stang, seconded by Dr. Blumenthal and Dr. Redelings. Dr. Joseph F. Smith was nominated by Dr. A. W. Rogers, seconded by Dr. Gaenslen. It was moved by Dr. Harper, seconded by Dr. Redelings, that nominations be closed and that the secretary prepare the ballots. Carried. Both Dr. Rogers and Dr. Smith requested that their names be not considered. The election resulted in the choice of Dr. A. W. Rogers, who assumed the chair.

4. It was moved by Dr. Stang, seconded by Dr. Smith, that a telegram of appreciation and flowers be sent Dr. Edward Evans, retiring chairman of the Council, whose presence at this meeting is prevented by illness. The motion was amended to include a telegram to Dr. Sidney S. Hall, treasurer emeritus and Dr. Charles S. Sheldon, secretary emeritus. Carried.

5. Election of the treasurer. Dr. Sleyster expressed his hope that the treasureship of the society might be vested in a new man and requested that he be not elected. Dr. T. J. Redelings, Marinette, presented the name of Dr. Sleyster for nomination which was seconded by Dr. Harper and Dr. Rogers. It was moved by Dr. Stang that the chairman cast a unanimous ballot for Dr. Sleyster. Carried.

6. Election of the secretary. It was moved by Dr. Blumenthal, seconded by Dr. Redelings, that the chairman cast the ballot for Mr. J. G. Crownhart, Madison. Carried.

7. The secretary presented the report on the Journal as follows:

REPORT OF WISCONSIN MEDICAL JOURNAL
December 31, 1928.

To the Editorial Board and
Committee on Auditing of the Council:

The financial report for the calendar year past is submitted herewith. Attention is called to the fact that in 1923 the Journal cost the Society over and above all revenues received, the sum of $5,500 a year. For the calendar year of 1927 this was reduced to $1,500 a year. For the calendar year of 1928, the Journal paid the Secretary-Managing Editor $100 a month as stipulated by the Council, paid salaries to a part time advertising solicitor, part time salary of a stenographer, all publishing costs, and its just portion of rent and yet the report shows a net gain in assets of $352.97 without receiving a dollar from the State Society.

This has been accomplished without lowering the advertising standards, which are those of the Journal of the American Medical Association. It is understood that this Journal is the only state journal to show an annual profit without support from its Society and maintaining the standards mentioned.

On the basis of this report, no financial aid is requested of the Society for the coming calendar year and henceforth all profits over a margin of safety will be re-invested in enlarging and bettering the Journal itself.

It is of interest to note that through the financial savings in the Journal alone, the State Society has saved the entire cost of a full time Secretary-Managing Editor.

Respectfully submitted,
George Crownhart,
Managing Editor.

FINANCIAL REPORT—1928

Receipts:		
Advertising	$11,089.56	
Subscriptions	68.73	
C. M. A. B. refund and misc.	458.76	
Total receipts		$11,637.05
Publishing Cost:		
Salaries	$ 2,321.44	
Printing	6,461.91	
Mailing	476.78	
Rent	395.00	
Discounts	1,171.40	
Cuts	162.94	
Miscellaneous	294.61	
Total cost		$11,284.08
Increase in net worth		$ 352.97
Assets:		
Cash in bank	$ 2,442.20	
Accounts Receivable	1,985.04	
P. O. Deposit	38.20	
Total		$ 4,465.44
Liabilities:		
Prepaid Advertising	77.50	77.50
Net Assets, Dec. 31, 1928		$ 4,387.94
Net Assets, Dec. 31, 1927		4,034.97
Net Gain during 1928		$ 352.97

8. Consideration of the budget. The treasurer presented the following statement on finance:

STATE MEDICAL SOCIETY OF WISCONSIN
TREASURER'S REPORT
As at December 31, 1928.

	General Fund	Medical Defense Fund
Balance January 1, 1928	$ 850.12	$1,384.93
Receipts during year	25,917.52	2,766.00
	$26,767.64	$4,150.93

Disbursements during year	25,469.95	1,492.35
Bank balance in funds December 31, 1928	$ 1,297.69	$2,658.58

RECAPITULATION OF FUNDS

General Fund:		
Bank balance December 31, 1928	$ 1,297.69	
Investment securities	18,000.00	$19,297.69
Medical Defense Fund:		
Bank balance December 31, 1928	$ 2,658.58	
Investment securities	2,000.00	4,658.58
		$23,956.27

DISBURSEMENTS FROM MEDICAL DEFENSE FUNDS

Aug. 4—Lines, Spooner & Quarles $ 1,492.35

9. The secretary and treasurer presented the following budget:

Report of the Treasurer and Secretary on Suggested 1929 Budget

ANNUAL INCOME

At present the annual income from dues (2,150 members anticipated for 1929) is $21,500. To this is added approximately $1,000 in interest from the surplus fund. Thus the total anticipated income for 1929 under present plans is $22,500.

THE BUDGET FOR 1929

(Numbers after items refer to notes at end of budget)

The budget as suggested for 1929 with comparative figures for 1928 is given herewith.

Office Expenses:	1928	1929	Increase	Decrease
Rent (1)	600	600	----	----
Supplies—light, 'phone	1800	1800	----	----
Travel, Secretary	900	750	----	150
Salary, Secretary (2)	5300	5300	----	----
Salary, Miss Jurgens (3)	1560	1560	----	----
Salary, Miss Ripley (4)	1560	1560	----	----
		11570		
Lay Education:				
Press Service (5)	2500	2750	250	----
Hygeia (6)	500	450	----	50
Radio Service (7)	500	----	----	500
		3200		
General:				
Sheldon Prize (8)	---	100	100	----
Annual Meeting (9)	500	2000	1500	----
AMA Delegates (10)	200	400	200	----
Comm. on Public Policy (11)	2000	2000	----	----
Secretaries' Conf. (12)	1500	----	----	1500
Blue Book (13)	600	850	250	----
P. H. E. Cards (14)	150	100	----	50
		5450		

Notes:

1. Rent. No change is essential.
2. Salary, Secretary. No increase is indicated in the figures given. Any increase in salary to be fixed by Council.
3. and 4. Salary, Miss Jurgens and Miss Ripley. The Secretary would like to see both raised $5 a month for the first six months and an additional $5 a month for the last six months of the calendar year, 1929. This increase, not provided in the figures above, would total for both the sum of $180.
5. Press Service. It will be remembered that this is the item for serving upwards of 250 papers in the state a story a week on services available to the public through the family physician for the prevention and cure of disease. An increase of $250 is indicated to care for the added expense of furnishing the service to a constantly growing number of papers. This item is not an increase in salary to the editor of the service.
6. Hygeia. This item is the furnishing of complimentary subscriptions to legislators, state officers, certain editors, prominent laymen and some libraries. A reduction is possible of $50 through new methods of presentation.
7. Radio Service. Last July the Milwaukee County Medical Society made arrangements with the Milwaukee Journal station WTMJ for a ten-minute broadcast once a week—Monday evenings at 7:00. Finding that the county society could not ethically have their individual members on the air, an appeal was made to the State Society to handle this service. An appropriation of $500 for the remaining months of 1928 was made by the Council as an experiment. While many difficulties have arisen, they have been met in the greater part and it is believed that this radio service may well be considered to be a valuable part of a broad lay educational program. The thought was to extend the same service to other stations in the state during 1929. This would cost $1,000, however, and unless additional finances can be secured your Secretary feels that it is the one activity that we could afford to suspend for a year. In other words, desirable as it may be, it is not as fundamental as the Press Service or the presentation of Hygeia.
8. Sheldon Prize. This was authorized at the last meeting of the Council as an annual prize for the best piece of scientific work accomplished by a member.
9. Annual Meeting. An increase of $1,500 is requested. This is the reason that largely alternating between Milwaukee and Madison in the future we may not well ask the local societies to provide the entertainment by assessing members every other year. In addition the new scientific demonstrations, which met with such favor at the last meeting, will be an added expense for future meetings.
10. A.M.A. Delegates. The last meeting of the A.M.A. was at Minneapolis. The next meeting is at Portland, thus provision must be made for the increased expense of the longer travel.
11. Committee on Public Policy. It is possible that all of this amount may not be needed but not knowing what may come up in the legislative session, this amount is indicated as a probable expense.
12. Secretaries' Conference. By reason of the fact that a special conference was held at Chicago in November, 1928, the second during the calendar year, no conference is indicated for 1929. The next conference will be held in January, 1930.
13. Blue Book. This publication met with favor on its initial appearance last year. A slight increase in appropriation is asked to provide additional copies and to secure a better binding.
14. P. H. E. Cards. It will be remembered that the first of last year an attractive office card on Periodic Health Examinations was issued to each member. This is approved for issuance in January, 1929, but due to better printing bids, a lesser amount is required.

SUMMARY OF BUDGET

Office expenses	$11,570	
Lay education	3,200	
General	5,450	
	$20,220	$20,220
Increase in salary for assistants (note 3-4)		180
		$20,400

Anticipated Income

Dues from 2,150 members	$21,500
Interest on surplus	1,000
	22,500
Budget requirements	20,400
Free balance	$ 2,100
Estimated surplus, 1928	1,300
Total free balance	$ 3,400

This free balance permits increase of salary of Secretary, and a margin for unexpected expense and like items.

ITEMS NOT IN BUDGET

The following items are not included in the 1929 budget, though authorized by the House of Delegates. Most of these items must be included, however, in the 1930 Budget.

1. Editorial prize for best essay on how family physicians may increase their usefulness $ 100.00

2. Radio service—state-wide	1,000.00
3. Medical film library service for county societies	500.00
4. Additional travel for Secretary	150.00
5. Secretaries' Conference	1,500.00
6. Organization of the Women's Auxiliary (estimated annual expense)	1,000.00
Total	$4,200.00

The council then discussed in detail each item on the budget taking the following actions:

a. Moved by Dr. Stang, seconded by Dr. Pope, that the report of the secretary on the Journal be accepted. Carried.

b. It was moved by Dr. Blumenthal, seconded by Dr. Smith, that the report of the treasurer be accepted. Carried.

c. It was moved by Dr. Doege, seconded by Dr. Blumenthal, that the books of the treasurer and secretary be audited. Carried.

d. It was moved by Dr. Stang, seconded by Drs. Redelings and Dodd, that the press service of the State Medical Society be continued for one year during which time Dr. Harper is to ascertain whether the State Board of Health can assist in the support of this service. Carried.

e. It was moved by Dr. Harper, seconded by Dr. Smith, that the presentation of Hygeia be continued. Carried.

f. It was moved by Dr. Stang, seconded by Dr. Doege, that the annual meeting appropriation be granted, but that the amount be lessened in the administration if at all possible. Carried.

g. It was moved by Dr. Pope, seconded by Dr. Smith, that the Blue Book be issued not more frequently than in alternate years. In the intervening years essential amendments to its contents shall be distributed to the members in such form as may be most convenient.

h. A discussion on salaries resulted in no present increase for assistants.

Adjournment for lunch.

When the council reconvened it resolved itself into a committee of a whole with members of the committee on medical defense. Dr. A. J. Patek, Milwaukee, chairman of the committee, discussed the legal counsel for the society in view of the recent death of Mr. Willett M. Spooner, of Milwaukee. After a full discussion the committee rose, after which it was moved by Dr. Blumenthal, seconded by Dr. Harper, that Mr. Ralph M. Hoyt, of Milwaukee, former deputy attorney general of the state, be now employed as legal counsel for such future cases as may arise under the medical defense fund of the State Society.

9. i. The secretary was excused during the discussion of his salary. After discussion a salary increase of $1,200 was voted.

10. It was moved by Dr. Smith, seconded by Drs. Cunningham and Dodd, that the Editorial board, if it sees fit, may run news items, society proceedings and like material in the rear section of the Journal opposite advertising pages. A discussion followed on other contributions to the Journal with the editorial board present.

11. The Council received the following report of its special committee on finance:

REPORT OF THE SPECIAL COMMITTEE ON FINANCE

To the Council:

As result of action of the Council, September, 1928, this special committee was appointed to consist of Dr. A. W. Rogers, Oconomowoc, Chm.; Dr. M. D. Bird, Marinette; Dr. F. J. Gaenslen, Milwaukee; Dr. Rock Sleyster, Wauwatosa and Dr. H. P. Greeley, Madison. The committee was asked to report its findings on the prospective financial condition of the Society to the Council meting of January, 1929.

For the convenience of the committee, a special budget study was made by the Secretary and Treasurer and a copy furnished each Councilor as well as members of this committee. Your committee then met at Chicago on November 15, 1928, and based on that preliminary report, it makes the following recommendations to the Council.

1. Your committee finds that the employment of a lay-secretary-managing editor has of itself been an economy to the Society; that while we are today expending on the basis of a budget of $22,500, the additional monies used over 1922 when the dues were $4 a year are used for the direct service of the members.

Your committee finds that if the Society is to progress in its service to the members a larger income will be essential in the years to come beginning with 1930 and it was moved by Dr. Bird, seconded by Dr. Gaenslen and adopted without dissent, that the committee recommend to the Council that dues of the Society be raised to $15 in 1930. Your committee calls attention to the fact that several societies have dues of this amount or larger, mentioning Minnesota—$15; Idaho—$40; Washington—$40, District of Columbia—$20; and Oregon—$20.

2. Your committee commends the Endowment and is proud of the present progress of the Endowment Fund. Briefly it will be remembered that this is to consist of monies given the Society by bequest and gift, the interest of which may be used by the Council to provide a service to the members that might not be secured by means of annual dues. Your committee feels that it would be well to undertake active efforts to build this fund and commends the following procedure:

That the Society receive gifts from the members and pay thereon five per cent annual interest during the life of the member with the provision that upon the death of the member further interest payments will cease and the principle will revert to the Society endowment fund. This guarantees the member a safe and fair rate of interest on the gift during the life of the member and will, it is believed, go far towards building the separate fund. Any difference between the safe rate of interest that can be secured on investments of such gifts and the rate to be paid of five per cent should be met from the general budget of the Society. Under no conditions is the principal to be used during the member's life. Moved by Dr. Sleyster, seconded by Dr. Bird, and adopted without dissent.

3. As result of discussion, your committee presents the following suggestion as one made during the meeting but upon which no action was taken. That to make some acknowledgment of outright gifts to the Endowment Fund amounting to $1,000 or more (upon which no interest is to be paid) the Society provide for and bestow the gift of life membership carrying with it all the prerequisites of membership in the Society, without the requirement of dues, assuming that the member continues in good standing in his county medical society.

Respectfully submitted for the Committee,
A. W. Rogers, M. D., Chairman

a. It was moved by Dr. Pope, seconded by Dr. Blumenthal, that the Council accept that portion of the committee report numbered as 2 in the report. Carried.

b. It was moved by Dr. Redelings, seconded by Dr. Doege and Dr. Sleyster, that the Council accept that portion of the committee report numbered as 1 in the report.

c. It was moved by Dr. Smith, seconded by Dr. Blumenthal, that the Council accept the suggestion numbered as 3 in the report and the report as a whole. Carried.

12. The secretary reported that a proposed press release had been submitted for a mail ballot but in as much as

two members had dissented, the release was presently before the council for action as follows:

State Medical Society of Wisconsin
Office of the Secretary
Madison

To the Council: December 6, 1928.

Some weeks ago Dr. Sleyster suggested that our weekly service to the press of the state (now serving all the 52 daily papers and some 275 weekly papers) should carry a statement on the physician in the rural community. Such a newspaper story has been prepared by the Secretary and is submitted herewith for your criticisms. Please advise me promptly whether you approve of this story or in what ways it should be changed.

Cordially yours,
George Crownhart.

Madison, Wis., Dec.— Are the smaller towns and villages of Wisconsin to lose their family physicians in the next few years? In a bulletin issued today J. G. Crownhart, Secretary of the State Medical Society of Wisconsin, suggests that this may come to pass if the residents of these smaller communities take advantage of the hard roads to "jump" their local physician except for night calls and emergencies.

"With the coming of winter, we are again receiving scattered appeals for the service of a physician from some of the smaller communities of the state", says the Society's statement. "Every effort is made to fill these vacancies satisfactorily but the event of good roads and the apparent inclination of the people to use them to secure the major portion of their medical services in the larger centers, may sound the knell of the physician in the small town.

"Entirely aside from his initial educational investment of possibly $15,000, a physician, like all people, desires to earn sufficient to support his family and lay aside something for the days when he no longer will be able to make midnight calls. If the people in the smaller communities secure their medical service in the larger towns and cities during the season of good roads, their home physician is deprived of just that much income and it is that which makes the difference between a practice that will enable him to live in the small town or necessitate his moving elsewhere."

The Society statement recognizes that in many instances the smaller centers no longer need their own physician and three or four such communities within a radius of a few miles, where good roads exist, may well have their service from one center.

"On the other hand", says the Society, "some communities that presumably have a sufficient territory to support a physician, are losing, or are about to lose their physicians. When the physician is gone and winter approaches, the people awake too late to find that they have deprived their own physician of an income that makes further stay possible.

"This statement is not issued to advise against the services of specialists or consultants, but to impress upon the public in the smaller communities that if they desire to keep their family physicians they must recognize them when the roads are good as well as in the dead of winter. If reference to a specialist is indicated, it is your family physician that is best in position to tell you just what type of services are needed and best secure them for you at a cost within your means."

A general discussion followed after which it was moved by Dr. Stang, seconded by Dr. Harper, that the release be published through the press service of the State Society. Carried unanimously.

13. A further discussion ensued on the Journal after which it was moved by Dr. Sleyster, seconded by Dr. Harper, that the editorial board be extended the appreciation of the Council for its efforts. Carried unanimously.

14. The Committee on Public Policy requested authority to support a measure in the legislature, should it be introduced, to the end that physicians and others might deduct on state income tax returns their expenses in attending scientific meetings as is permitted under the federal law. It was moved by Dr. Blumenthal, seconded by Dr. Redelings, that such authority be granted. Carried.

15. An extended discussion followed on the subject of fee-splitting and it was moved by Dr. Dodd, seconded variously, and carried, that the following statement be published as the views of the Council for the information of the members. (The statement is published separately in this issue of the Journal.)

16. Reports of the councilors were received and discussed.

17. After discussion the secretary was granted authority to promote lay education on the subject of cancer through the organization of lay support by the Wisconsin Committee of the American Society for the Control of Cancer.

18. The secretary brought to the attention of the Council that the Councilors Dodd and Smith had both commented on the large territory included in their respective districts with resultant inability to visit each society therein once a year as required by the constitution. Following discussion it was moved by Dr. Dodd, seconded by Dr. Pope, that the chairman of the Council appoint a committee of five to consider the subject of redistricting or creating additional districts, such committee to report to the Council at its first meeting prior to the 88th annual meeting, 1929. Carried.

19. Dr. W. G. Sexton, Marshfield, chairman of the Committee on Scientific Work, presented the preliminary recommendations of the committee in some detail. It was moved by Dr. Dodd, seconded by Dr. Blumenthal, that the committee report be adopted. Carried.

Adjournment at 5:15 p. m.

COUNCILOR REPORTS

SECOND DISTRICT

All societies have been visited by the councilor during the year.

The Walworth County Society at present has thirty members. They hold regular monthly meetings—usually on the first Tuesday. Their programs consist of one local member presenting a paper and one outside man. Usually the meetings are held in the evening preceded by a 6:30 dinner, average attendance being fifteen.

The Kenosha County Society also hold monthly meetings. The programs consist of some subject presented by an outside man and occasionally a local man. They have forty-three members—average attendance being twenty. Meetings are held at 8:00 P. M., some of them being preceded by a 6:30 dinner. In November a dinner and meeting was held at which the Racine County Society members were guests. This was a fine type of meeting—scientific, legal and ethical problems being brought up. President Karl Doege was present.

The Racine County Society has had only five meetings in 1928. These have been held in a hospital class room at 4:00 P. M. Usually an outside man has presented a paper on the newer things in medicine and surgery. These meetings have been of great interest and well attended, we shall endeavor to have more frequent meetings in 1929.

In February the Racine County Medical Society invited the Kenosha and Walworth County Societies to a

dinner at 6:30 P. M. held at Racine. This was a social and scientific meeting at which President J. J. McGovern and President-elect Karl Doege were present.

The District Meeting was held in August at Lake Geneva. A 12:30 dinner was followed by the meeting. Dr. Bill and Dr. Keenan did everything to make the meeting a success. President J. J. McGovern addressed the members and Dr. Miller gave an interesting talk on obstruction of the lover end of the duodenum as a pathological entity. Secretary Mr. George Crownhart was also present and addressed the meeting which was well attended. An interesting and enjoyable time was had by everyone. Entertainment was provided for the ladies.

All the meetings attended by the councilor were very interesting, scientific and well conducted.

Frank W. Pope, Councilor.

SIXTH DISTRICT

As councilor of the sixth district I report as follows:

The different organizations of the sixth district have enjoyed a very active and profitable year.

The number of meetings of the county medical societies have been, Brown-Kewaunee eight, Fond du Lac seven, Outagamie nine, and Winnebago eight.

The character of the programs has been excellent and the attendance very encouraging.

Your councilor has attended meetings in each county.

At the district meeting held at Appleton (jointly with the 8th District) speakers came from important medical centers and the program was very successful despite the absence of one speaker and the lack of "terminal facilities" by another speaker.

There has been a very splendid evidence of friendliness and cooperation between the different societies and the past year may be considered as very successful with every evidence pointing toward the same conditions for 1929.

F. Gregory Connell, Councilor.

EIGHT DISTRICT

I am constrained to report the eighth district as functioning normally and with only minor fluctuations in its numerical strength.

Shawano county holds quarterly meetings. A verbal report from the secretary indicates a small attendance.

Oconto county continues to maintain a paper organization. It holds no scientific meetings. The effect of the sad accidental death of its long time president, Dr. C. W. Stoelting, upon the Oconto county profession is problematical.

Marinette-Florence county holds animated monthly meetings, with harmony and good-fellowship prevailing. We lost one member by removal and two by delinquency. We have one new memmber.

The status for the district membership is a follows:

Marinette-Florence	20
Oconto	12
Shawano	11
Total	43

The sixth and eighth districts held a joint meeting on June 11, 1928 at Appleton. This meeting was well attended and accounted a great success. Much credit for the success of this meeting goes to the members of the Outagamie county society and the councilor of the sixth district.

Your councilor visited Shawano county in 1927. Tentative dates were arranged for a visit in 1928 but were not matured.

T. J. Redelings, Councilor.

NINTH DISTRICT

Report of meetings held during 1928. Total number, 16.

Clark County—2 meetings, May 18, 1928 and August 24, 1928.

Green Lake-Waushara-Adams County—3 meetings, Dec. 2; Feb. 23 and April 19.

Lincoln County—1 meeting, November 8, 1928.

Portage County—4 meetings, January 26, 1928, April 30, 1928, September 10, 1928, and December 19, 1928.

Waupaca County—1 meeting, May 14, 1928.

Wood County—2 meetings, February 27, 1928 and May 3, 1928.

Marathon County—6 meetings, January 18, 1928, March 1, 1928, April 5, 1928, September 27, 1928, October 8, 1928, and December 5, 1928.

I have met with all societies during the year except for Green Lake.

Joseph F. Smith, Councilor.

Division of Fees; A Statement by the Council State Medical Society of Wisconsin

At the last session of the House of Delegates (1928), the subject matter of fee-splitting came before the members acting as a committee of the whole. In that discussion it was apparent that some members had varying conceptions of what was meant by the term "fee-splitting." To the end that there might be a common understanding of the position of the Council and House of Delegates of the State Medical Society on this subject matter, this statement is presented for the information of the general membership.

The views of the profession banning the practice of fee-splitting as unprofessional conduct are to be found in the Principles of Ethics of the American Medical Association and constitute an integral part of that code. No discussion of this particular part of the code should be had, however, without first pointing out that the principles of ethics is essentially an agreement between members of the Society as to conduct, the agreement being based upon the joint interest of the profession and the public.[1] In such an agreement or code an effort is made to be as definite as possible in indicating certain practices that are not considered to be in the interest of the profession or public. It must be granted at the outset, however, that

a code is primarily worded to indicate the principles or thoughts it is wished to convey and not worded so as to prevent one from evading it by strict constructions.[2] Those who agree to abide by a code or set of principles agree to do so not only as to the definite prohibitions that may be set forth but in the broad principles that underlie and permeate the entire subject. The Principles of Ethics of the Association are not drawn as laws, worded in an endeavor to prevent every possible evasion. They are drawn to serve as guide posts on a road that leads to the mutual benefit of the profession and public.

One who evades a law will be subjected to certain penalties if convicted and the police forces of the nation may seek the offender, and bring him to the bar of justice. One who evades a code of ethics after agreeing to abide by its principles may do so for a time with apparent impunity but such a person endangers not only his personal standing but, betrays his profession, and abuses the confidence that the public reposes in the profession as a whole because of its known standards.

In discussing so much of the Principles of Ethics and actions of the Society as pertains to fee-splitting we must recognize that the underlying thought of this section is threefold. First, the welfare of the patient is paramount. Second, there should be no secret agreements between physician and physician that may lead a physician to refer a patient to another for profit to the physician, rather than for benefit to the patient. Third, medical services should be within the means of all at a price the patient can afford to pay, keeping in mind their respective stations in life. Services are thus rendered for a fair compensation and not for unearned profit.

Now just what does the Principles of Ethics of the A. M. A. say with reference to fee-splitting.

"Secret Division of Fees Condemned

"Sec. 3. It is detrimental to the public good and degrading to the profession, and therefore unprofessional to give or to receive a commission. It is also unprofessional to divide a fee for medical advice or surgical treatment, unless the patient or his next friend is fully informed as to the terms of the transaction. The patient should be made to realize that a proper fee should be paid the family physician for the service he renders in determining the surgical or medical treatment suited to the condition, and in advising concerning those best qualified to render any special service that may be required by the patient."

If one reads this statement with a view to determining its underlying spirit, only one interpretation may be had. If one should read this statement with the thought of evading it or of even abiding by strict construction of a phrase or clause rather than its spirit, perhaps many interpretations may be found.

Because the discussion at the state meeting hinged in part on the Wisconsin law on this subject, let us examine the law[3] to see what that says. Briefly it declares that division of fees to be illegal as between physician and physician, nurse, anaesthetist, assistant, firm or corporation. Fee-splitting is declared to be a criminal fraud, cause for revocation of license, and further, each person who makes a charge against the patient must render a separate statement therefore.

It has been claimed that the law as enacted in this state exceeds the requirements of the Principles of Ethics of the A. M. A. On this point Dr. Olin West, secretary and general manager of the American Medical Association said (April 11, 1928):

"I do not believe that the Wisconsin statutes exceed in legal requirements those of the moral code of the Association. Both the Wisconsin statutes and the Principles of Medical Ethics of the American Medical Association seek to prevent fee-splitting. It is true, of course, that the Wisconsin statutes, as I read them, specifically require that separate statements shall be rendered by physicians whose services may be employed in the treatment of the same case, while no such specific provision is included in the Principles of Medical Ethics. So far as the moral aspects of the proposition are concerned, however, it appears to me that both the Principles of Medical Ethics and the Wisconsin law seek to effect the same result."

By request this statement was referred to the Judicial Council of the American Medical Association and was by them informally approved in June, 1928, and formally approved at their November meeting.

We thus see sustained the point made at the introduction of this article that while the code speaks in broad terms for guidance of a highly educated profession, a law must speak specifically and in language that leaves its intent clear to the average person. In such a case it may not be said that the law supersedes the code, but rather interprets it.

Based upon the letter of Dr. West and its affirmation by the Judicial Council, the House of delegates at its meeting declared that the interpre-

tation by Dr. West would be henceforth the interpretation of the State Medical Society of Wisconsin "in any case that may hereafter come to the attention of the Society as a whole or any component part thereof."

With the foregoing in mind we are now in position to discuss some of the various problems and questions that have heretofore arisen in consideration of the code and the Wisconsin law.

1. A surgeon each Christmas "remembers" such physicians as have sent him referred work during the year with gifts of instruments and other things of marked value. He does not so remember other friends who may even be closer friends in fact but who have not so referred patients. Clearly here is an evasion of the code and law.

2. A family physician accompanies his patient to a surgeon for operation. The referring physician is invited to assist in the operation and does so assist. Irrespective of the fact that separate bills may be rendered thereafter, if an agreement exists whereby the physician knows in advance that he may have the opportunity to assist in all operations to which he accompanies the patient, an offer has been made by the surgeon which violates the code and the law. It is a fact too well known to permit of discussion that a surgeon does his best work when he has about him those who are accustomed to his peculiarities, his style if you wish. For a surgeon to substitute for his regular assistant a physician who is with him but seldom, to the end that such physician may have the opportunity to get a little more money out of the case may be nothing less than tragedy to the patient and the family. It may be said, "But the patient knows the family physician is going to assist and is glad that he is to be present". True, the patient may know who is going to assist but he cannot know nor be expected to know that such procedure is a custom not adopted in hospitals of standing for reasons cited and others uncited. One should not ask a patient to waive his rights when the patient has no real knowledge of the consequences. It may be said that the present day graduate is a perfectly competent assistant and that opportunity must be provided him to keep up his surgical experience. With that we may agree except that we can admit of no practice that will unconsciously tend to lead a physician to refer a patient to such a hospital and such a surgeon as will allow him to assist in the work for additional compensation, not earned in service to the patient.

Some additional consideration is given this hypothetical case by reason of the fact that it was a case on which argument has been heard before the Society. From the foregoing it is not claimed that it is unethical or illegal per se for a family physician to accompany his patient to the surgeon and thereafter assist at the operation. It becomes so if the understanding exists that such opportunity is at all times available, the consequences of which understanding are a secret to the patient even though he may know the surface facts and assent to them, indeed, even be pleased to do so.

3. It is said that a patient goes to a given clinic for medical care. It is discovered that surgery is indicated and the patient is referred to the surgeon of the clinic. The referring physician may thus share in the profits of the operation. Is that not fee-splitting? Plainly a patient that goes to a clinic knows of the relationships that exist between physicians in that firm or corporation. Indeed, that may be an added reason for his going to the clinic. No fee-splitting exists unless we are to accuse the internist of being dishonest to his own patient by referring him to the clinic surgeon when he knows the surgeon to be incompetent to handle such a case. Again we must have some faith that men who sign a code intend to abide by its broad principles and are not going to seek to evade it, stooping to common dishonesty as the means of such evasions. Such practice could not long continue with profit to the institution. The people compare notes too much these days to permit of the bad results of such practice going long unknown.

4. A case was cited not many months ago where the referring physician assisted the physician and in Case 1 the referring physician collected and retained the whole fee and in Case 2 the surgeon collected and retained the whole fee. Plainly this is fee-splitting, illegal and unethical.

5. As a last example, Doctor A refers a case to Surgeon B. Surgeon B. asks Doctor A, "What can this patient afford, you know my fee for this is usually $200." Doctor A says that the patient probably cannot afford any more than that sum for the entire illness. Doctor B, keeping in mind that the hospital bill will be about $60, appreciating further that Doctor A is entitled to compensation for the valuable services he has rendered

in diagnosis and care prior to the operation, makes his fee for the operation $90. Thus Doctor A will have opportunity to charge and collect some $50 for his services to which sum he is fully entitled. The question is then asked if this is not a division of fees and therefore unethical of not illegal. The answer is "no." Dr. M. L. Harris, president-elect of the American Medical Association has recently said in point, "I do not believe that the surgeon who operates on the case should take all the money that the patient is able to pay, leaving nothing for the physician. I believe the physician and surgeon should each present his own bill based on the services rendered and the ability of the patient to pay. It seems to me that that method of doing business is so simple, so easy, and so straightforward that I cannot see the need of doing it any other way."

It may be questioned if such discussion as has been had with reference to fee-splitting in recent years was not brought about by the gratitude of the patient towards the surgeon and the lack of understanding that the family physician has rendered at least an equal service by his accurate and timely diagnosis and wise reference. Some may think this suggestion far afield but may it not be that certain evasions that have been forwarded as justifiable procedures were really attempts to solve this problem in a superficial way? Of course fee-splitting, whatever form it may take, cannot solve the problem for that would be giving a surface remedy for a deep-seated disorder.

It has been said that even physicians have played up the surgeons as the "first violins" and certainly it is true that in surgical cases the public has the tendency to look upon the surgeon as the miracle man and the family physician as a necessary stage prop. So it is said that unless the surgeon collects the bill for the family physician, the latter will go unpaid. Are we then to nurture this public misapprehension rather than change it? If this situation be fundamental, let us declare that we will solve the problem on its own ground. We will seek a remedy rather than apply an evil practice that we cannot justify.

Much has been said about members of a certain organization whom it is alleged, violate the oath they take; and of organizations that seek to "strangle" small hospitals and honest men in small communities. Such practices, if they exist, bring a deserved contempt for the men concerned and the organization that tolerates such practices, and the effect may be to generate general contempt of the law. We prefer, however, to discuss our own organization problems and our own organization efforts. Whatever may be the aims of other medical societies, the State Medical Society of Wisconsin will ever endeavor to be of service to the great group that compose the majority of its members—the general practitioners of the state. And in that service it is not possible nor desirable to go so far afield as to attempt to sway or deter any other professional organization in fields which are not ours.

Possibly the greatest asset of the medical profession today is the confidence reposed in it by the public. No condition now exists that gives cause for the public to believe that it has misplaced that trust. Remembering that in many fields this organization can do more for the individual physician-member than he can possibly do for himself, let us not forget that any step towards condoning that which is unethical or unlawful, be it in fee-splitting or in any other field, may bring down on the Society, the profession as a whole and on every practitioner therein, the greatest of all possible losses—the loss of that confidence. Such a disaster would be reflected in legislative halls and in every walk of life. Let us therefore make our efforts constructive and meet the problems that come before us on grounds of common understanding. Let each work to bring about an even greater public trust that inevitably will bring still greater benefits to the public, reflected in larger returns for those who serve them.

1. Principles of Medical Ethics, Chap. I, Sec. 1.
2. Principles of Medical Ethics, Conclusion.
3. Wisconsin Statutes, 343.322.

STATE TESTS FOR UNDULANT FEVER

The State Laboratory of Hygiene is now making agglutination tests for the diagnosis of undulant fever on all specimens of blood sent in for typhoid. This test, of course, will also be done on special request. The dried blood specimens are not considered entirely satisfactory for the test. When positive or suspicious results are obtained with these specimens, requests are made for whole blood, two to four cubic centimeters in a Wassermann vial, so that proper aggultination tests may be carried out with the serum. Since beginning this work a few weeks ago, two cases have been diagnosed by this method.

Undulant fever has not been a reportable disease in Wisconsin and it is not possible to state accurately its past prevalence. A few cases only have been made known to us either through the laboratory or through hearsay

reports. Until late years Malta fever or undulant fever, though common enough around the Mediterranean and some other parts of the Old World, was thought to exist in America only near the Mexican border and was there attributed largely to the use of goat's milk.

Investigations of recent years have proved there are varying strains of bacillus melitensis, the causative organism of Malta fever, and one of these strains is bacillus abortus, or the organism causing contagious abortion in cattle. Contagious abortion in cattle has long involved herds of cattle both in this country and abroad and has been destructive of the productivity of cattle, but has hitherto been regarded as harmless to the human being. Medical literature of the last four years, however, attests to the fact that an occasional case of undulant fever exists in man arising from the milk of infected cattle; or sometimes, as in slaughter-house workers, through contact with infected hogs, which are also subject to a strain of the same bacillus.

The U. S. Public Health Service reports that in Iowa the diagnosis of undulant fever has been established in eighty-three cases up to June, 1928. A spot map of these cases shows them to be sporadically occurring there, widely scattered over the state. What the true prevalence in Wisconsin proves to be will be ultimately shown through laboratory reports.

Clinical descriptions of cases of undulant fever derived from cattle and hogs are to be found in a number of medical journals. For good descriptions on symptomatology we are referring you to the Journal of the American Medical Association, June 2, 1928, and to the U. S. Public Health Reports of September 21, 1928. There is a considerable variation in different cases. The onset, in most persons, is insidious and weakness is commonly complained of. Profuse perspiration, headache, backache, arthralgia, insomnia and irritability, anorexia often with periods of good appetite are mentioned as symptoms. The temperature is intermittent, with daily remissions and in addition is inclined to undulation of several days' length, sometimes taking the form of long intermissions in which the temperature is normal. Anemia is present and the total white blood count tends to leukopenia. The cases range from ambulatory types, with a low grade of symptoms and little appearance of prostration to high febrile states. It is said that the disease has persisted as long as three years, but the description of the Iowa cases states that three weeks to nine months covered the duration there.

Undulant fever has been mistaken for typhoid fever, paratyphoid, articular rheumatism and other troubles. Laboratory tests should prove valuable to ill-defined febrile states of uncertain origin. Pasteurized milk kills the causative organism and the preponderance of patients is likely to be among farmers who come in contact with abortive cattle, slaughter-house workers and users of raw milk. While the terms Malta fever and undulant fever have both been applied to this disease, it is perhaps more appropriate to reserve the term Malta fever to the form arising through contact with goats, clinical descriptions of which may be found in text-books.

HOYT NEW DEFENSE COUNSEL

Following the death last fall of Mr. Willett M. Spooner, for many years counsel of the Medical Defense of the State Medical Society of Wisconsin, the Council of the Society elected at its January meeting Mr. Ralph M. Hoyt of Milwaukee as the new counsel for the Society.

Mr. Hoyt was born in 1890 and graduated from the University of Wisconsin Law School in 1912 with high honors. He was admitted to the bar the same year and for two years was assistant secretary of the Wisconsin Railroad Commission. From 1914 to 1920 he practiced in Milwaukee and from January, 1921 to February, 1923 was Deputy Attorney General for Wisconsin. Since 1923 he has been a member of the firm of Hoyt, Bender, McIntyre and Hoyt of Milwaukee with offices in the Security building.

Married in 1917, Mr. Hoyt has two children. He is a member of the American Bar Association and a member of the Madison Club and of the Milwaukee and University Club of Milwaukee.

Mr. Hoyt will handle all future medical defense for members of the Society who elect to take the Society's medical defense feature. All notices of actions, however, should be first sent to the Secretary of the Society at Madison for approval by the Medical Defense committee.

MR. RALPH M. HOYT

Medical Extension; Minutes of the Joint Meeting of the Executive and Advisory Committees

Office of Dean Chester D. Snell
Madison, Wisconsin

December 20, 1929—2:00 P. M.

1. Dean Snell presided with the following members present: Drs. C. R. Bardeen, Joseph S. Evans, R. C. Buerki, K. W. Doege, K. H. Doege, R. L. MacCornack, Otho Fiedler and J. F. Wilkinson; Prof. Lighty of the Extension Division, Mr. Allen of the Extension Division and Mr. J. G. Crownhart, secretary of the State Medical Society. Absent: Dr. M. D. Bird (temporarily in Florida).

2. Dean Snell reported that to date Dr. Wayne Rupe had conducted two series of courses on the subject of pediatrics. The first circuit was composed of the cities of Antigo, Marshfield, Wausau, New London, Rhinelander and Stevens Point. One hundred and one were registered in this circuit with an average percentage of attendance of 82.2. See Table 1.

A second circuit included the cities of Beaver Dam, Janesville, Beloit, Watertown, Madison and Fond du Lac with 93 registered (percentage of attendance not as yet compiled). See Table 2.

Dean Snell presented summaries of the questionnaire sent all who had taken the two courses (Table 1 and 2) in which it was indicated that the courses were meeting with enthusiastic approval of the membership.

3. It was voted that when the course in pediatrics had been completed throughout the state, certificates issued for attendance records would be discontinued.

4. The report on the packet library service from Miss Frances B. van Zandt was summarized as follows: In October, 1927, the first month of the service, 13 requests were filled. In October, 1928, 547 requests were filled. In November, 1927, 81 requests were filled, and in November, 1928, 521 requests were filled. A total of 3,309 requests were filled during the first year of the service ending October, 1928. It was reported that the service was prepared to give biographic references, journals, books and reprints. The service is now receiving $4,000 annually from the Medical Extension fund which represents but one-half the cost of the service, the other half being met by the University Medical School.

It was moved by Dr. Fiedler and seconded by Dr. Bardeen that Mr. Crownhart communicate with the secretary of the Michigan State Medical Society to secure the approval of that society for extending the packet library service to physicians on the upper peninsula as a courtesy service from Wisconsin.

5. A report of the lecture service under University Extension funds whereby county medical societies might secure speakers without cost to the society was presented with the following summary: During 1928, 63 different speakers attended 51 separate group meetings. It was pointed out that those who do this work from the University of Wisconsin Medical School and its staff are the only group in the faculty of the University which is rendering such a service without pay. Dr. Buerki stated that the only difficulties encountered in rendering the service desired by the county medical societies were that the societies some times gave too short a notice and at other times failed to list second choices. He declared that it was some times impossible to get the man of first choice and that subsequent preferences should always be submitted so that the society would receive the type of lecture that it desired.

6. The committee then took up the discussion of approving plans for the next eighteen months.

a. It was moved by Dr. Evans, seconded by Dr. Fiedler, and carried, that Dr. Rupe be retained for one year at a salary of $10,000 to present lectures and clinics on pediatrics in circuits to be organized as follows: Milwaukee circuit, to include Kenosha, Racine, Milwaukee, Waukesha and Sheboygan, approximate dates February 25th to May 17th; Northwest circuit, to include Ashland, Superior, Rice Lake, Hudson, Eau Claire, Whitehall or Chippewa Falls, approximate date May 27th to August 16th; Western circuit, to include Platteville, Richland Center, La Crosse, Tomah, Portage and Monroe, approximate dates August 26th to November 15th, with the exception of the week of the State Medical Society meeting at Madison, September 7th to 12th, inclusive. The Fox River Valley circuit would include Sheboygan, (if not included in the Milwaukee circuit) Oshkosh, Manitowoc, Appleton or Neenah, Green Bay, Marinette and possibly Es-

canaba, Michigan, approximate dates November 25th to February 14th, 1930.

It was suggested by Dr. Wilkinson that county societies in circuits yet to be organized be advised by Dean Snell of the splendid reactions of the members in other portions of the state where the circuits have been completed.

b. After discussion it was voted that a course on medical diagnosis and treatment be given in the North Central circuit this summer to include the cities of Antigo, Marshfield, New London, Rhinelander, Stevens Point and Wausau. Discussion followed on possible lecturers for this course and it was voted that Dean Snell correspond with Dr. O. H. P. Pepper, associate professor of medicine at the University of Pennsylvania; Dr. L. D. Thompson, assistant professor of medicine of Washington University, and Dr. Stewart Graves, dean of Alabama University Medical School. It was the consensus of opinion that the new course should be conducted through the five other circuits of the state as rapidly as may be accomplished if the summer trial course proved as successful as the courses in pediatrics.

c. A discussion followed on the advisability of a pre-annual meeting course for the State Medical Society members on subjects allied to scientific medicine such as legal medicine, psychology, ethics, medical economics, etc. It was moved by Dean Snell, seconded by Dr. MacCornack, and carried, that Mr. Crownhart be designated as chairman to ascertain whether such courses over a two day period would be interesting to the membership and to arrange for such courses if found desirable. It was the consensus of opinion that a small charge of $5.00 or $6.00 be made for each in attendance, if the courses were held, to defray the essential expenses.

d. Short courses at the University were discussed and a committee appointed to consist of Dr. R. C. Buerki, chairman, Dr. C. R. Bardeen, Dr. Joseph Evans and Dr. K. W. Doege, to decide upon a course or courses to be given during the Christmas-New Year vacation of 1929.

c. A sum of $300 was appropriated under the heading of visual instruction and Mr. Crownhart and Mr. Hanson of the Extension Division were designated as a committee for the expending of this sum for the purchase of approved moving picture films for display to medical group meetings.

7. The budget was presented by Dean Snell for the period ending July 1, 1931. (See Table 3) This budget was based on the assumption that the legislature will continue the annual appropriation of $5,500. The budget as presented was approved in its entirety. The meeting adjourned at 5:30 p. m.

TABLE 1.
Questionnaire
North Central Wisconsin Circuit

1. WHERE DID YOU ATTEND THE COURSE?

Center	No. in Class	Certificates Granted*	No. of Returns	Percentage of Returns
Antigo	14	10	9	64.2
Marshfield	15	12	14	93.3
New London	19	13	18	94.7
Rhinelander	19	15	14	73.6
Stevens Point	18	15	14	76.6
Wausau	16	16	12	75
Total	101	81	81	79.5

*Certificate granted only to those attending nine or more meetings.

2. WERE THE LECTURES EXCELLENT, GOOD, FAIR, PASSABLE, OR POOR?

	Total	Antigo	Marshf'ld	N.L'don	R'lander	St. Point	Wausau
Ex.	67	7	12	12	13	13	10
V. G.	1	--	1	--	--	--	--
Good	12	2	1	5	1	1	2
Fair	1	--	--	1	--	--	--
Pass.	--	--	--	--	--	--	--
Poor	--	--	--	--	--	--	--
Totals	81	9	14	18	14	14	12

3. WERE THE CLINICS EXCELLENT, GOOD, FAIR, PASSABLE, OR POOR?

	Total	Antigo	Marshf'ld	N.L'don	R'lander	St. Point	Wausau
Ex.	14	--	5	--	5	1	3
Good	13	--	2	3	2	2	4
Fair	8	--	2	1	--	1	4
Pass.	3	--	2	--	--	1	--
Poor	5	--	1	--	1	3	--
Little or none	38	9	2	14	6	6	1
Totals	81	9	14	18	14	14	12

4. (a) WHAT PART OR CHARACTERISTIC OF THE COURSE DO YOU CONSIDER THE MOST VALUABLE?

A. Lectures:
1. Practical; Variety 38
2. Rickets and infant feeding 15
3. Symptomatology and treatment 1
4. Rickets and infection 1

B. Clinics 4
C. Discussion 2
D. All O. K. 13

(b) DO YOU THINK A DIFFERENT APPORTIONMENT OF CLASS TIME SHOULD BE MADE?

Yes—17 No—64

IF SO, HOW MUCH TIME SHOULD BE DEVOTED TO: LECTURE, DISCUSSION, CLINIC?

More clinics 3
More time to lectures 3
Lecture 1 hr.; discussion ½ hr.; clinic ½ hr. 2
Lecture 1 hr.; discussion ¼ hr.; clinic ¾ hr. 1
One-third for each division 2
More discussion 1
Lecture ¾; clinic ¼ 1
Half and half 1

5. IF ANOTHER COURSE WERE TO BE GIVEN IN YOUR LOCALITY, WHAT SUBJECT WOULD YOU SUGGEST?

(Continued on page 100)

THE JOURNAL BOOK SHELF

Nasal Neurology, Headaches and Eye Disorders. By Greenfield Sluder, M. D., clinical professor and director of the Department of Oto-Laryngology, Washington University School of Medicine, St. Louis. With 167 illustrations, including two color plates. Price $11.50. C. V. Mosby Company, St. Louis, 1927.

Syphilis. By Charles C. Dennie, M. D. Price $2.50. Harper & Brothers Publishers, New York City.

Urology, Textbook of. For students and practitioners. By Daniel N. Eisendrath, M. D., attending urologist, Michael Reese and Memorial Hospital, Chicago, and Harry C. Rolnick, M. D., associate urologist, Mt. Sinai Hospital, and adjunct urologist, Michael Reese Hospital, Chicago. Illustrated. Price $9.00. J. B. Lippincott Co., Philadelphia.

Treatment of Disease in Infants and Children. By Hans Kleinschmidt, M. D., professor of Pediatrics, University of Hamburg. Authorized translation of the fifth German edition with additions by Harry M. Greenwald, M. D., attending pediatrician to the United Israel Zion Hospital, Brooklyn, N. Y. P. Blakiston's Son & Co., Philadelphia.

Infancy and Human Growth. By Arnold Gessell, M. D., director, Yale Psycho-Clinic, professor of Child Hygiene, Institute of Psychology, Yale University. The Macmillan Company, New York, 1928.

The Simple Goitres. By Robert McCarrison, M. D., associate fellow of the College of Physicians, Philadelphia. Price $4.00. Wm. Wood & Company, New York, 1928.

Operative Surgery. By J. Shelton Horsley, M. D., attending surgeon, St. Elizabeth's Hospital, Richmond, Va. With 765 illustrations. Third edition. Price $15.00. C. V. Mosby Company, St. Louis, 1928.

BOOKS RECEIVED FOR REVIEW

Laboratory Manual of the Massachusetts General Hospital. By Roy R. Wheeler, M. D., and F. T. Hunter, M. D. Second edition, enlarged and thoroughly revised. Price $1.75 net. Lea & Febiger, Philadelphia.

Bronchial Asthma. Its Diagnosis and Treatment. By Harry L. Alexander, M. D., associate professor of medicine in the Washington University Medical School, St. Louis, Mo. Illustrated. Price $2.25 net. Lea & Febiger, Philadelphia, 1928.

The Fuel of Life. Experimental studies in normal and diabetic animals. By John James Rickard Macleod, professor of physiology, University of Toronto, Canada. Price $2.50. Princeton University Press, 1928.

Recent Advances in Chemistry in Relation to Medical Practice. By W. McKim Marriott, M. D., dean and professor of pediatrics, Washington University School of Medicine. Illustrated. Price $2.50. C. V. Mosby Company, St. Louis, 1929.

Blood. A study in general physiology. By Lawrence J. Henderson, professor of biological chemistry in Harvard University. More than 200 illustrations. Price $5.00. Yale University Press, New Haven, 1928.

Acute Infectious Diseases. By Jay Frank Schamberg, M. D., professor of dermatology and syphilology in the Graduate School of Medicine, University of Pennsylvania, and John A. Kolmer, M. D., professor of pathology and bacteriology in the Graduate School of Medicine of the University of Pennsylvania. Second edition, thoroughly revised. Illustrated with 161 engravings and 27 full-page plates. Price $10.00 net. Lea & Febiger, Philadelphia, 1928.

Pediatrics for the General Practitioner. By Harry Monroe McClanahan, M. D., professor of pediatrics emeritus, University of Nebraska. Two hundred and thirty illustrations. Price $6.00. J. B. Lippincott Company, Philadelphia and London.

Compend of Diseases of the Skin. By Jay Frank Schamberg, M. D., professor of dermatology and syphilology graduate school of medicine, University of Pennsylvania. Eighth edition, revised and enlarged with 126 illustrations. Price $2.00 net. P. Blakiston's Son & Co., Philadelphia.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Secretary, Mr. J. G. Crownhart, 119 E. Washington Ave., Madison, Wisconsin. These new books will be loaned for an inspection period only.

Roentgenology. Its early history, some basic physical principles and the protective measures. By G. W. C. Kaye. With forty-nine illustrations. Price $2.00 net. Paul B. Hoeber, Inc., New York.

In this booklet of 157 pages the author, who is superintendent of physics at the National Physical Laboratory of England, takes one, in an hour or so of easy reading, through the various scientific discoveries of the past four centuries which contributed to the discovery by Roentgen in 1895 of the x-rays, describes recent experiments in physics tending to show that the x-rays and light rays obey the same laws of reflection and diffraction, discusses x-ray protection and protective materials, and finally presents the recommendations of the safety committee of the International Congress of Radiology which met in Stockholm in 1928. The material presented should be of much interest to both radiologist and physicist and the latter chapters containing the recommendations of the safety committee should have the careful consideration of every person concerned with the building of hospital, private or industrial x-ray laboratories.

What seems a most unusual statement, coming as it does from a great scientist and investigator is one in the chapter devoted to the quantum and wave theories of radiation in which the author says, "Even the so-called laws of nature are beginning to be looked upon not so much as inherently simple and fundamental relations, but rather as mere expressions of something essentially statistical and which indicate nothing more than the most likely trend of events."

Not the least interesting to practising roentgenologists will be the illustrations of prints from x-ray negatives made in 1896, one of which is said to have been taken from the first roentgen-ray negative of a human hand made January 16, 1896. J. E. H.

The Mounds Park Sanitarium

This institution is a general hospital, especially equipped for the treatment of mental diseases. It offers all of the recognized essentials for this treatment.

Specialists in diagnosis and care.

A staff of consulting physicians and surgeons.

Hospital care, partial or complete isolation from former environment.

Especially trained nurses and hospital staff.

Hydrotherapy and occupational therapy.

An atmosphere of cheerfulness.

Earl Street at Indian Mounds Park

Saint Paul
Minnesota

Medical Extension; Minutes of Joint Meeting

(Continued from page 97)

(Number giving two or more choices—15)

Business side of medicine	1
Dermatology	5
Eye, ear, nose, and throat	2
Fractures	4
Internal medicine	48
Internal medicine (24)	
Medicine (12)	
Physical diagnosis (4)	
Therapeutics (2)	
Chest (1)	
Contagious diseases (1)	
Diabetes (1)	
Heart (1)	
Pneumonia with complications (1)	
Materia Medica (1)	
Genito-Urinary	1
Obstetrics	12
Surgery: General	2
Minor	1
Orthopedics	2
Arthritide; postural defects, etc.	1
Gynecology	2
Pediatrics	3
Roentgen diagnosis	1
X-ray	3
Urology	2
Venereal diseases	1
Use of electricity in medicine	1
Need most everything	1

6. WHAT SUGGESTIONS HAVE YOU TO OFFER FOR THE IMPROVEMENT OF THIS PLAN OF POSTGRADUATE WORK?

Instruction of the same caliber as Dr. Rupe's.

Continuous course of lectures with perhaps only a short interval between courses. (Doege, Pres. State Med. Society.)

Longer time at each lecture and discussion.

More courses regularly.

More clinics (cooperation of physicians in furnishing material).

Have courses earlier in summer to avoid vacation period.

Course not to be given at 8:00 a. m., especially for physicians who must drive a long distance.

Not too long distance to center.

Daytime work.

TABLE 2.

Questionnaire
South Central Wisconsin Circuit

1. WHERE DID YOU ATTEND THE COURSE?

Center	No. in Class	No. of Returns	Percentage of Returns
Beaver Dam	10	9	90
Beloit	10	9	90
Fond du Lac	26	17	65
Janesville	12	6	50
Madison	24	17	70.8
Watertown	11	9	81.8
Total	93	67	74.6

2. WERE THE LECTURES EXCELLENT, GOOD, FAIR, PASSABLE, OR POOR?

	Total	B'ver Dam	Beloit	Fond du Lac	J'ville	Madison	W'town
Ex.	59	9	8	13	6	15	8
V. G.	2	--	--	2	--	--	--
Good	6	--	1	2	--	2	1
Fair	--	--	--	--	--	--	--
Pass.	--	--	--	--	--	--	--
Poor	--	--	--	--	--	--	--
Totals	67	9	9	17	6	17	9

3. WERE THE CLINICS EXCELLENT, GOOD, FAIR, PASSABLE, OR POOR?

	Total	B'ver Dam	Beloit	Fond du Lac	J'ville	Madison	W'town
Ex.	8	--	4	3	--	--	1
Good	33	5	5	4	2	13	4
Fair	14	1	--	7	2	1	3
Pass.	2	2	--	--	--	--	--
Poor	3	--	--	2	1	--	--
Little or none	7	1	--	--	5	--	1
Totals	67	9	9	16	10	14	9

4. (a) WHAT PART OR CHARACTERISTIC OF THE COURSE DO YOU CONSIDER THE MOST VALUABLE?

A. Lectures:	
Practical	3
General	26
Ped. for General Man	1
Infant feeding	11
Rickets	3
Therapeutics	2
Diet	1
Suggestions on treatment	1
B. Clinics	3
C. Combined lecture and clinics	4
D. All O. K.	7
E. Review	1
F. New ideas	1
G. Personal and human touch	1
H. Well outlined approach to each subject	1

(b) DO YOU THINK A DIFFERENT APPORTIONMENT OF CLASS TIME SHOULD BE MADE?

Yes—3 No—61

IF SO, HOW MUCH TIME SHOULD BE DEVOTED TO: LECTURE, DISCUSSION, CLINIC?

More of the lecture if no clinical material is available	1
At least ¾ time to lecture and rest to discussion unless clinical material is supplied	1
One-third to each—lecture, discussion, clinic	1
1 hour to lecture; 15 minutes to discussion; 45 minutes to clinic	1

5. IF ANOTHER COURSE WERE TO BE GIVEN IN YOUR LOCALITY, WHAT SUBJECT WOULD YOU SUGGEST?

(Number giving two or more choices—11)

Cardia-renal diseases	1
Chest, Diseases of	1
Diabetes	1
Diet and food values	1
Fractures	6
(Obstetrics	8
(Gynecology	5
Genito-Urinary	3
Heart, Diseases of	2
Minor surgery	1
Orthopedic surgery	1
Pediatrics	1
Professional ethics and financial advice to doctors	1
Psychiatry	1
Serum therapy	1
Skin diseases	2
Nervous diseases	1
Anything good	1
Internal medicine	25
Internal medicine (18)	
Phys. diagnosis (3)	
General diagnosis (1)	
Therapeutics (1)	
(Physical therapy (1)	
(Physio-therapy (1)	

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Urology; Its Trends*

By H. M. STANG, M. D.
Eau Claire

There is no field in surgery which has made greater advances and, from a practical point of view, more definite conclusions in diagnosis than urology. We may dare say that with the development of the modern cystoscopes and their accessory equipment including the x-ray, urological tables and high frequency current, that no branch of medicine and surgery has kept pace with its accuracy of findings.

A knowledge of anatomy, physiology, chemistry and pathology of the urogenital tract with an opportunity for clinical application of this knowledge has developed and will develop to a greater degree skilled urologists. In fact, these men will be so competent because of their training that nearly all problems in diagnosis and treatment of this branch of surgery can be taken care of satisfactorily both to the patient and physician. Careful study, a consideration of details, time for analysis and not snap diagnoses are required to produce these results.

During the last few years rapid changes have taken place in urology as well as in all other branches of medicine and surgery. So rapid, in fact, it is difficult for those practicing in this field to keep abreast, to say nothing of the men in general practice.

In the time allotted only an attempt will be made to enumerate briefly some of these advancements and what the trends of the future will be.

Anaesthesia has played an important part in the development of urological surgery. Advances are being made in the technique of the local infiltrating type, sacral, transacral, spinal, etc., which is greatly aiding the surgeon with the aged patients especially, who previously were bad risks with ether. Nitrous oxide and ethylene should also be included. Greater relaxation of the patient with less risk is obtained because more time is allowed for better and more thorough work.

The x-ray and radium have been important factors, disappointing in many respects but gratifying in others. Experimentation in dosage and its application is still in progress as in all other branches of medicine but some very definite results have been obtained.

The x-ray has been found to be of distinct value as a curative measure in only a small class of tumors and those are in the early mixed tumors and sarcomas of the testicle. Otherwise this form of therapy is only beneficial in relieving pain in advancing carcinomas of the bladder and prostate. Another use is that it helps to keep a well-to-do patient satisfied that something is being done. Thus he may not leave and seek the promised cures of quackery.

Radium is of special value in the treatment of certain types of bladder tumors and in a very few instances may be of value in early malignancy of the prostate. It also may be of benefit in epitheliomas of penis when not far advanced, with no metastasis in the groin. Radium application first, and excision with cautery knife of this type of tumor may produce a brilliant result. We have such a case living two years and with no evidence of return. X-ray of lymph glands in groin may be of benefit but perhaps radical dissection after radiation would be better.

The high frequency current is used a great deal. How much value there is in diathermy in the acute and chronic specific and non-specific infections is hard to judge. It depends upon the enthusiasm of the administrator. In acute epididymitis the Corbus clamp is of distinct value in some cases. However, as brilliant results are obtained with other means.

In the past there has been much confusion as to the treatment of bladder tumors. A great deal of this can be eliminated from a practical point of view if the clinical findings are observed more carefully. So many pathological and histological classifications are in use it is difficult to know which to use and how to proceed.

Unfortunately we all are unable to grade the malignancy of our tumors as Broders of Rochester

*Presented before 87th Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, Sept., 1928.

who apparently is producing brilliant results. This would help considerably in our treatment.

Fulguration is of distinctive value in the complete destruction of simple papillomas either in the bladder or deep urethra. If these types of tumors are found, whether benign or malignant, all respond to radium and fulguration which can be applied through the cystoscope. It may be well to remember that some papillomas return in showers and are removed with difficulty. As for papillary carcinoma of the bladder we should learn if the tumor is of infiltrating or non-infiltrating type. If the latter, it will respond to surface application of radium and if the former, extensive surgical procedure with wide excision by knife or cautery knife is necessary. Transplantation of ureter is often a forced procedure. Application of radium by implant or seeds may follow the excision of the tumor. The actual cautery is still used and also the scapel, but the future of patient is not so secure with the latter. All of these tumors are slow in growing and slow in metastasis. Another word of caution. Do not try to fulgurate too large a tumor through cystoscope. The patient may pass on before it is burned away, so much time is lost. Also some tumors far advanced are better left alone. The operative mortality statistics will appear much better.

In the treatment of acute and chronic Neisser infections nothing startling has been offered. A few new dyes are being used. Some claim brilliant results with vaccines and foreign proteins. In our hands the results are about the same. (wish Dr. Thomas would give his present conclusions on vasotomy).

BLADDER AND PELVIS

In the acute and chronic infections of the bladder and kidney pelvis a great deal has been accomplished. A thorough and complete urological examination will give all necessary information about the deep urethra, bladder, ureter and kidneys. Complete bacteriological studies with guinea pig inoculation should be made. This procedure is going to be used more and more by physicians and surgeons.

Acute and chronic infections of the kidney pelvis need drainage and lavage especially where there is retention. Caution as to when this should be instituted is necessary in some of the acute cases. (The subject of stricture of ureter and pyelitis of pregnancy will be taken up by others.) Modern cystoscopy and treatment is saving many kidneys for individuals where they were previously removed.

Conservatism in regard to surgical interference of the kidney is increasing. Radical procedures are giving way to drainage and dilatation of ureter from below. Some very able plastic surgery on the kidney pelvis at uretero-pelvic juncture is being performed where strictures, acute angulations and aberrant vessels are found. Cystoscopy and pyelography have made this possible.

Nephropexy has its place but still is in the class of chronic appendix with many surgeons. It is easy to do and something is being done. The benefits, however, are not glowing and most of the patients still have their symptoms. In certain cases brilliant results are obtained but careful study, patience and not one examination should be the deciding factor as who to operate.

All kidney tumors are surgical if not too far advanced because it is the patient's only opportunity to get well or have his life prolonged. Usually when seen it is too late. Practically all tumors of this type can be diagnosed pre-operatively by cystoscopy.

Calculi in urogenital tract are treated as previously but with greater conservatism, and removed surgically if producing symptoms and infection. In lower third of the ureter most of them are taken out through bladder by means of cystoscope, if not too large. In the bladder many can be crushed and removed without opening the bladder. In the kidney pelvis or cortex the amount of infection and destruction decides whether to remove kidney or incise pelvis or parenchyma. If stones are multiple it is necessary to remove all of them or the patient may have return of symptoms before he leaves hospital. X-ray films are being taken at the operating table and the fluoroscope is also being used. Many kidneys are being spared because the location of shadows can be determined accurately, whether they are in kidney, ureter, bladder, urethra, gall bladder or are calcified glands in these areas.

Tuberculosis of kidney is being studied carefully. Medlar, formerly of University of Wisconsin, now with Research Department of Metropolitan Life Insurance Company, believes he has found healed tuberculosis in the kidney. If early infections of this nature are diagnosed and they can be, these patients will be treated as incipient

pulmonary tuberculosis with rest, diet, fresh air, sunlight and proper food. However, when destruction has taken place with abscess formation and is unilateral, with good function in other kidney, removal has produced excellent results. Of course it is a forgone conclusion that this patient is not riddled with tuberculosis elsewhere. Careful observation and accuracy of diagnosis before surgery is instituted is absolutely necessary. The guinea pig is a valuable assistant in your studies of this condition.

INJURIES TO KIDNEYS

Injuries to kidneys are being treated conservatively for they often heal spontaneously. Many of these patients are in shock. Close observation with repeated blood counts, blood pressure readings and urine examinations will help in determining if surgical interference is essential. Often nephrectomy must be done and it is well to remember that during removal of a rupture kidney or any kidney that a clamp left on the pedicle for two, three or more days will do no harm and may save the patient rather than lose him upon the operating table. Also a good firm, large gauze pack where clamp has slipped and vessels have retracted will nearly always take one out of an embarrassing situation. Transfusion should follow immediately.

The management of the prostatic has developed to a degree which is very encouraging. The dangers of the operation have been almost entirely removed if patients are carefully observed. Casualties from emboli and the pneumonias will always be with us. These patients are not in the preferred class. Preparation before operation is essential. Who to operate and when is the question. Knowledge of the condition of the heart, circulatory system and kidneys is important. Are they competent to stand the ordeal? Is there retention of nitrogenous waste products in the blood stream? Is the retention fixed? What is the function of the kidneys? Prostatectomy should be performed to relieve symptoms and to cure. The desire and haste to operate should be forgotten. It is often advisable to send a patient home with an indwelling catheter or supra-pubic drain for a few months rather than to operate too soon. Decompression of an acutely distended bladder usually saves the patient for further treatment where complete emptying of bladder by catheter or supra-public drainage often loses him. Education and further studies of this nature are progressing.

Vasectomy before inserting urethral catheter or removing prostate eliminates almost entirely postoperative epididymitis which complicates convalescence and is very annoying.

Two stage operations and occasionally three are practically always made except in few selective cases and those very selective. Supra-pubic is the popular route and the safest generally, although Young's perineal method is gaining favor; due chiefly to the development of more skillful surgeons. The small fibrotic type of prostate and the early carcinomas are more satisfactorily removed through the perineum.

Hemorrhage following prostatectomy has been minimized by various types of packs, bags and methods of suturing the capsule. Malignancies are still a grave problem. If seen early, surgery or radium may produce the desired result. However, it seems that the wisest procedure to follow is to leave the patient alone until acute retention developes and then produce permanent suprapubic drainage in the moderately advanced conditions. The patient lives as long or longer and usually happier. The prostatic bar type of obstruction producing retention and frequency can now be removed intravesically easily and safely with several types of punch instruments.

UROLOGY IN CHILDREN

Urology has made its greatest advance in the last few years in the study of urological conditions in children. The reasons are many but the chief one is because of the increased knowledge of pathology in the adult. Conclusions were naturally drawn that these findings must be present to a certain extent in the infant and child. Autopsy records varified this. The development of the various types of small cystocopes is clearing the situation.

Any child no matter how small can now be examined cystoscopically without harm if care and gentleness is taken. Anaesthesia is usually used but it is surprising how much can be accomplished without anaesthesia if patience and not haste is given to the maneuver. Surgery, unless in emergency, is not advisable under four years of age. The female child should always be catheterized and can be easily. Urinary findings are inaccurate otherwise.

Cooperation between urologists and pediatri-

cians, also between urologists and family physicians and surgeons will relieve many difficult problems of diagnosis and treatment in children. Repeated attacks of pyelitis without response to medical therapy can be relieved by catheterization of ureters and drainage as in the adult. Tuberculosis, hydronephrosis, calculi and even tumors can be diagnosed and judicial treatment advised. Enuresis is often a pathological entity due to infection or an anomaly which can only be diagnosed with cystoscopic instruments and pyelography.

This field in urology has only been started due to the fact that opportunities for its advancement have been meagre. The future has great things in store for these small individuals.

For discussion see page 110.

Hunner's Stricture; Present Status*

By W. G. SEXTON, M. D.
Marshfield Clinic
Marshfield

During the seventeen years that have elapsed since Hunner gave his first paper on ureteral stricture, there has been a great controversy among urologists as to the accuracy of his observations. Some claimed it was all a myth, others that strictures exist but are extremely rare. It was admitted that urograms might show dilatations and narrowings in the ureter but these were in reality spasmodic contractions or were secondary to an inflammatory process in the kidneys that had extended downward into the ureter. I cannot enter into a discussion of this controversy, so I shall merely summarize my views which coincide with those of Hunner.

Classification of Strictures:
Tuberculous
Secondary to tumors
Secondary to trauma
Congenital
Inflammatory (Hunner)

The first three are so obvious that they do not require any discussion. It is extremely difficult at times to differentiate clinically between an acquired stricture and one of congenital origin. As the symptoms and treatment are in their main essentials identical they may be considered together.

PATHOLOGY

Hunner's first observations were entirely clinical and there were few if any pathological observations except in the extreme grades of dilatation. His view is that this is a chronic inflammatory condition of the ureteral wall resulting in infiltration and varying degrees of narrowing of the lumen. Hunner and Wharton followed a small series of their stricture cases to autopsy and found strictures present.

Carson confirmed these findings in his studies at the University of Maryland. Schreiber made careful examinations of the ureters in 100 unselected consecutive autopsies at the Senkenberg Pathological Institute, Frankford on Main, and found ureteral stricture or stenosis in 12% of cases.

ETIOLOGY

It has always been Hunner's contention that these inflammatory lesions were secondary to distant foci of infection, especially in teeth, tonsils or the accessory nasal sinuses. This has been doubted by many pathologists. Miloslavich thinks it never occurs. Schreiber in the series of autopsies just referred to could not convince himself that distant foci of infection were present. From the clinical point of view I have so frequently failed to obtain permanent relief from dilatation of the ureter until after diseased tonsils had been removed or infected sinuses had been drained, that I shall continue to look for foci of infection in these cases.

SYMPTOMS

The symptoms of ureteral stricture are of such a protean character that it is impossible to discuss this phase in detail. One may encounter pain in the urinary tract varying from the intense renal colic that simulates that of calculus to the more or less constant backache that is so often associated with a mild hydronephrosis. One may have all grades of bladder irritability. It may be accompanied by a great deal of pus in the urine or with practically negative findings.

As many strictures are in the broad ligament region it may simulate any pelvic condition. Many cases of dysmenorrhea are really ureteral strictures. Gastro-intestinal disturbances are very frequent.

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It is now admitted that any number of cases that have had operations for chronic appendicitis, gall bladder trouble, suspension of the uterus, post operative adhesions and ovarian resections were stricture cases. I wish to emphasize a very important point in the differential diagnosis between chronic appendicitis and ureteral strictures. The stricture case is always tender on palpation along the course of the ureter as it crosses the brim of the pelvis. This is along the outer border of the rectus and below the umbilicus and quite a distance from McBurney's point. Attention to this detail will save many a patient a needless operation for appendicitis. Strictures are so commonly the main etiological factors in pyelitis that all evidence of renal infection, such as pyuria, hematuria, chills and fever, must be looked upon as suspicious signs of ureteral obstruction. The surgeon who is at all conscientious will try conservative treatment in these cases before resorting to a nephrectomy.

RELATION TO CALCULI

In our series of renal and ureteral calculi we have found strictures present so often that I believe they play an important part in the formation of calculi in the upper urinary tract.

Surgeons are not justified in operating for renal or ureteral calculi without a thorough investigation of the ureters. Ureteral strictures produce essential conditions for calculi formation.

1. Stagnation.
2. Concentration.
3. Infection.

RELATION TO PYELISTIS IN PREGNANCY

A careful study of over fifty cases of pyelitis in pregnancy convinces me that stricture of the ureter is the most important factor in the condition and that pressure of the pregnant uterus plays an insignificant role.

DIAGNOSIS

Hunner uses wax bulbs of varying sizes upon a No. 8 catheter which he passes through a Kelly cystoscope. This produces a definite "hang" upon withdrawing the catheter and he believes this is the most accurate method of detecting strictures. In my hands the Kelly cystoscope in the knee chest posture is very awkward so I have used the Brown Berger type and have relied upon urograms and clinical tests until recently when I secured a McCarthy foroblique cystoscope which will readily permit the passage of bulb catheters.

There is great variation of opinion as to the interpretations of the urograms. One must keep in mind that there are distinct physiological points of narrowing in the ureter. However, a normal urogram should not show distinct stricture areas. One may find varying grades of dilatations of the ureters, all indicating stricture, if one uses care in injection and pulls the catheter down as he injects. Spasm of the ureter does exist and one must not make a positive diagnosis in a doubtful case from one x-ray film.

Urograms will often show an anomaly such as a double ureter with only one ureteral orifice or a horseshoe kidney which would be missed by the use of the bulb catheter alone.

TREATMENT

It is now quite obvious that the essential treatment in stricture of the ureter and in pyelitis which I believe is practically always secondary, is thorough dilatation in order to establish good drainage. This must be done gradually and carefully and must be carried far enough to secure permanent relief. Many cases are relieved by dilatation up to No. 10. Others require No. 14, but this cannot be accomplished except in treatments seven to ten days apart. Pelvic lavage is of little value. Search for foci of infection.

CONCLUSIONS

After many years experience in the treatment of ureteral strictures I believe that they are of common occurrence and if dilatations are done carefully and thoroughly the results are excellent. And finally that the medical profession owes a great deal of gratitude to Hunner for calling our attention to this clinical picture.

For discussion see page 110.

The Child With Potential Heart Disease

C. G. Kerley, New York (Journal A. M. A., Feb. 16, 1929), stresses the fact that there is a type of child that is particularly susceptible to the infecting agencies that cause heart disease. Such a child possesses what is termed a favorable soil and may be recognized and belongs to one of the three groups: Those who have or who have had rheumatic fever; those who have or who have had chorea; those who complain repeatedly of pain in the extremities which may not be accounted for by trauma or disease. A particularly susceptible child may be classified as belonging to the three groups. Heart disease in children so afflicted may be prevented in many by the eradication of diseased foci, first with a persistent and later with an interrupted use of salicylic acid alone or combined with an alkali. When physicians appreciate the dormant possibilities behind the "growing pains," heart disease will be appreciably lessened.

Urology; Some Common Mistakes*

By E. A. FLETCHER, M. D.
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It is said that "Criticism is the life of Science". Frank, free, constructive criticism helps solve many a problem, and while the conscientious physician must needs be his own most severe and relentless critic, he can but rarely be his most intelligent critic.

The urethral catheter is our most commonly used and misused urological instrument. Many a man carries crippled kidneys for life because of its improper use or the lack of its use and if the annual mortality rate of catheterization were known, it would be surprisingly high.

The acute retentionist, save in acute cord lesions, notably vertebral fractures, rarely suffers from the effects of catheterization. It is the chronic retentionist who pays toll to his own and to our ignorance and the greater the retention the greater the liability. Likewise, if the chronic retentionist has a clear and uninfected urine the dangers of catheterization are multiplied, and this is so because these patients frequently have a fragility of their kidneys of which there is no external evidence and a very marked predisposition to urinary infection following catheterization. I refer especially to the man with the distended bladder and incomplete retention with a clear and uninfected urine, and report such a case.

A rather fat, stout man, aged 68, came to the office with the complaint that he had returned to the habits of his childhood days. He was again a bed-wetter. This was his sole complaint, and this had existed for the past two months.

He volunteered the information that he had consulted several physicians and taken much medicine without any relief.

Further questioning elicited the following facts.

1. He had the classical prostatic syndrome.
2. Polyuria was marked.
3. Nocturnal incontinence had existed for six or eight weeks.
4. He had never had an acute retention.

Before getting upon the table he voided three ounces of a perfectly clear pale urine, containing neither sugar or albumen. By rectal palpation he had a moderately enlarged benign prostate and what was thought to be a distended bladder was felt. Four ounces of clear pale urine were withdrawn by the catheter, but the bladder was not emptied.

The patient was told that he should go to the hospital at once and have a suprapubic cystostomy and later on a prostatectomy all of which seemed to him like very radical procedures for the cure of his complaint and he decided to return home to consider the matter.

In ten days the man was dead. Following the first catheterization he had a chill and fever, his urine became cloudy, later purulent and finally bloody. Oliguria and anuria developed and the man died in coma. He died as a result of that first catheterization which was done with meticulous care.

This man represents the type of a class of patients which is rapidly disappearing, now more common in country than in city practice. But there will always be a certain number of prastatics who have incomplete retention with distention and a clear urine and they are a very difficult class of patients to treat successfully, because of three facts:

1. The apparently, to the patient, benign nature of his complaint.
2. The extreme fragility of his kidneys.
3. The remarkable predisposition of his urinary tract to infection following catheterization.

Examining these patients in detail we find that the bladder gradually distends and when the residual urine reaches a certain point, a pint to a quart, nocturnal incontinence develops. At first this incontinence is always nocturnal. Later it may become diurnal also.

There is a gradual increase in the effete nitrogenous products in the blood and in an effort to eliminate these, the kidneys excrete an abnormally large amount of water. This polyuria is the first visible evidence of the failing kidney function. With the polyuria there is an increased and often an unquenchable thirst. Later on polyuria is followed by oliguria.

Sooner or later these patients all develop a distaste for meat.

Left to themselves, they finally all die from renal insufficiency. Catheterized in the stage of polyuria, may be but once, the majority will die.

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A few may survive after a stormy period of infection.

Cystostomized without any preliminary catheterization they all recover if they have not reached the oliguric stage.

Why these patients have such fragile kidneys, or why they are so prone to urinary infection following catheterization, are unsolved problems.

COMPLICATIONS FOLLOWING PROSTATECTOMY

How to avoid some of the complications or sequels of prostatectomy such as secondary hemorrhage, epididymitis and pyelo-nephritis has given many of us much concern.

Maintaining the urinary tract in as aseptic a condition as is possible, lessens the frequency of these sequels, and preventing urination till the fifteenth or twentieth day or even longer is a factor of importance.

The following history very well illustrates one of the dangers of early voiding.

Eight days after a prostatectomy the suprapubic wound was healed and the patient voided in amounts of 2-4 ounces. The night of the eighth day he had a severe hemorrhage while voiding and as it showed no signs of abating his suprapubic wound was re-opened and the prostatic bed packed. He had two blood transfusions and finally a through and through hot silver nitrate irrigation stopped the bleeding.

If suprapubic drainage had been maintained in this patient for a period of two or three weeks, it is most unlikely that any hemorrhage whatever would have occurred.

Ureteral strictures are one of the none too few bête noires of medicine.

That they really exist and may be overlooked I can testify after having had more than one regrettable experience with them.

Picture to yourselves a little woman weighing 100 lbs., easy to examine, who before the age of 25 was operated upon for appendicitis, urethral and rectal fistulae.

For the following ten years she had repeated attacks of cystitis of variable duration.

At the age of 40 she commenced to have backache and pain in each lower abdominal quadrant increased by exercise and relieved by rest, and because of these severe pains she was confined to the house most of the time, living the life of a semi-invalid.

Examined by internists, surgeons and myself, we each failed to find the cause of her pain.

Examined by Dr. Hunner three years ago, he found bilateral ureteral strictures.

After ten dilatations, five on each side, and a three months rest period, she wrote me that she was not any better, was very discouraged and doubted the diagnosis.

Ten more dilatations were made and for the past year and a half she has had no treatment of any kind and no pain and leads the life of a normal woman.

For discussion see page 110.

Pyelitis of Pregnancy*

By G. K. WOOLL, M. D.
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Pyelitis is not an infrequent complication of pregnancy and as such is not only a grave menace to the mother but to the foetus for many such cases terminate prematurely[1]. Thus pyelitis in the pregnant woman is a serious condition which is of interest not only to the urologist, but also to the obstetrician and the general practitioner as well.

Pyelitis was first described by Rayer in 1840[2], but was not brought to the attention of the medical profession until 1893, when Relaub reported several cases at the congress of French surgeons.

Pathologically, cases of pyelitis show an inflammation caused by pathogenic bacteria together with a dilatation of the kidney pelvis, and dilatation and kinking of the ureters, the right kidney and pelvis being involved most frequently. The organisms most frequently found are the Bacillus coli, occasionally streptococci, staphylococci, Bacillus proteus vulgaris, pneumococcus, Bacillus typhosus and Bacillus paratyphosus and even gonococcus has been reported as the infecting agent. There are three routes by which these pathogenic organisms may gain access to the pelvis of the kidney, namely:

Through the blood stream, as demonstrated by Wedal and Bernard, who were able to isolate the colon bacillus from the urine and also from the blood, in two of their cases, and proved that they were the same organisms by the agglutination test.

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Secondly, through the lymphatics. This mode of infection was demonstrated by Francke in 1913[3], for he showed that the lymphatics of the colon pass over the capsule of the right kidney, and Stahr from his experimental work believes that the lymphatics of the kidney capsule communicate with those of the kidney parenchyma.

The third and probably the most frequent way in which organisms reach the pelvis is by extention up the ureter from the bladder. Some very interesting experiments have been carried out to demonstrate this fact by Goldsmith and others. They found that under certain conditions there were antiperistaltic movements in the ureters causing the contents of the bladder to be propelled into the kidney, and that partially filling the bladder is sufficient to close the ureteral orifices, the result being that each variation in intravesical pressure is transmitted to the renal pelvis. Kretschmer has also demonstrated this fact by filling the bladder with certain pyelographic material and obtaining pyelograms in normal individuals, thus proving the work of Goldsmith[4].

Probably the most important predisposing cause of pyelitis is that of stasis in the urinary tract which may be due to strictures of the ureters, obstructions caused by congenital malformations, postoperative adhesions, and pressure of surrounding tissue upon the ureters such as the pregnant uterus, thus causing an increased back pressure in the ureter and kidney pelvis resulting in a dilatation of the upper urinary tract, and frequently distortion of the ureters.

Kretschmer and Heaney[5] in their pyelographic studies of pregnant women have brought out some very interesting and important facts. They found in eleven cases of acute pyelitis that six cases had dilatation of the kidneys and ureters on both sides, three cases had dilatation only of the right kidney and ureter and two other cases in which one side only was injected showed dilatation. "Since dilatation was uniformly found, the question arose as to whether dilatation occurred only in those cases with pyelitis, or whether it occurred commonly in pregnancy", so another series of pyelograms were made on patients with a normal uncomplicated pregnancy. The results showed that eighty per cent of normal pregnancies have a dilatation of the upper urinary tract; that bilateral dilatation occurred most frequently; that the right side showed dilatation more frequently than the left; that primiparas were more frequently affected than multiparas, and, that pyelitis occurred at any time during the pregnancy. In view of these facts one must admit that stasis is undoubtedly a most important predisposing factor.

Alberg[2] has shown that fifteen per cent of pregnant women have a bacteriuria, thus a bacteriuria in the presence of a stasis of urine will easily set up a pyelitis.

SYMPTOMS

In acute cases there is chill, fever of varying degree which is hectic in type, dysuria, frequent urination, pain in the back and along the course of the ureter. The kidney is usually enlarged and tender to palpation and the ureter may be palpated and extremely tender to the touch. Early in the disease there may be suppression of the urine followed in a short time by an increased amount containing pus, epithelium and bacteria in large numbers.

SUBACUTE CASES

The symptoms of subacute cases are about the same except that they are milder. There are complications such as renal calculi and pyonephrosis which may give rise to severe symptoms.

The diagnosis is made from the above symptoms together with the following findings: There is generally a history of previous infections of the urinary tract. The pain radiates from the kidney down the course of the ureter toward the bladder. Vomiting is rare except when the pyelitis is complicated by a stone in the ureter. Tenderness is present along the course of the ureter. There is no abdominal rigidity. The fever is of the hectic type and may go as high as one hundred five degrees. There is marked frequency of urination and tenesmus when cystitis is a complication. The blood count shows a leukocytosis occasionally as high as twenty-five thousand. A urinalysis will show bacteria, pus, epithelium and a small percentage of albumen. When cystoscopy is available the diagnosis is easily made for the examination will show swollen and inflamed ureteral orifices and frequently an accompanying cystitis; if the bladder is normal catheterization of the ureters shows cloudy urine heavily laden with bacteria.

Since appendicitis is probably the one condition with which pyelitis is most frequently confused, and, with the foregoing points in mind, I wish to review briefly the symptoms of appendicitis to demonstrate the difference between the two conditions. The pain is usually on the right side and radiates toward the umbilicus. Vomiting is us-

ually present and occurs early. Tenderness is present over McBurney's point and the lower abdomen. There is rigidity especially of the right rectus. The temperature may not be high but is constant. The pulse is usually about one hundred or slightly above. Tympanites is usually present. The urine is negative although it may show a trace of albumen. The cystoscopic examination is negative. Other conditions which should be borne in mind are ureteral calculi, puerperal sepsis and acute infection of the biliary tract.

TREATMENT

The prophylactic treatment consists of making repeated urine examinations during the course of pregnancy and relieving any urinary disturbance immediately upon its discovery.

The treatment of acute cases as used in my own practice is as follows: The patients are put to bed given 2500 to 4000 cc of fluids per day. The diet consists generally of milk, where it is not objectionable to the patient, until the acute symptoms have subsided. Hot, wet compresses over the kidney generally are sufficient to relieve the pain; and when necessary I do not hesitate to use morphine or some of its derivatives.

The medical treatment consists of ten grains of hexamethylenamin four times a day together with ten minims of aromatic sulphuric acid or ten grains of acid sodium phosphate four times a day. These drugs are given for five days, then the reaction of the urine is abruptly changed to alkaline by giving fifteen grains of potassium citrate and also seven and one-half grains of salol four times a day. This alkaline medication is continued for five days when the patient is again put on the hexamethylenamin and acid sodium phosphate. The symptoms of the majority of acute cases will subside in a short time under this regime, and improvement can be seen within a few hours after the treatment is instituted. Occasionally there are patients who develop a hematuria on a small dose of hexamethylenamin. These individuals are usually given the alkaline treatment only, or are given hexylresorcinol. Some patients improve quite rapidly on hexylresorcinol although the bacteriuria does not clear up quite as rapidly in my experience, as with some of the other urinary antiseptics.

Patients who fail to show improvement or who are very septic early in the disease should be cystoscoped, not only for a diagnosis but for treatment. The cystoscopic treatment consists in catheterizing the ureters, draining and lavaging the kidney pelvis. There are several solutions which may be used for a lavage, but silver nitrate in a one or two per cent solution works very satisfactorily. The majority of cases require only one or two lavages of the kidney pelvis and occasionally I leave the catheters in place for twenty-four hours and have the kidney lavaged at frequent intervals, thus insuring good drainage.

Pelvic lavage is harmless and causes very little distress to the patient when properly executed and affords quick relief even in very severe cases.

"When medicinal treatment and pelvic lavage have failed to produce results, then, and then only, are surgical procedures justifiable."[6] Some cases will clear up only upon the interruption of the pregnancy, and in very rare cases is it necessary to perform any operations on the kidney itself.

Patients who have had a pyelitis during the course of a pregnancy should be kept under observation until after the puerperium, as acute exacerbations of the disease may take place at any time.

CONCLUSION

1. Pyelitis is not due directly to pregnancy, but in a majority of cases it is due to a chronic preexisting condition which is activated by the additional work thrown upon the kidney during pregnancy.
2. Pyelitis may develop at any time during a pregnancy.
3. An early diagnosis and treatment will prevent serious sequelae.
4. Pelvic lavage is harmless and offers quick relief of symptoms.
5. Surgical procedures are justifiable only when all other measures have failed.

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Discussion on Symposium on Urologic Problems

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Mr. President and Members of the State Medical Society of Wisconsin: I first wish to express my deep appreciation of the honor you have conferred upon me by asking me to come out here to open this discussion. I really have very little criticism to offer. I think this symposium on the subjects in urology as presented here today, has been of exceptional merit. I do not recall when I have listened to a finer symposium than the one just presented, not excepting those from our national meetings.

I quite agree with Dr. Stang in practically everything he said. The subject of anesthesia, regional, transsacral or caudal, in urology today, is one of paramount importance and compared with general anesthesia, particularly in the bladder and prostatic operations, should enlist the attention of all up-to-the-minute urologists and surgeons.

I quite agree with him on the subject of radium, namely, that its value today is mainly empirical. Personally, I feel that radium has very little place in the treatment of cancer of the bladder. Moreover, I feel it has very little place in cancer of the prostate, unless by its use we can bring about some temporary benefit in the reduction of the size of the gland, reducing the amount of urinary retention and thereby prolong the patient's life for an indefinite period. Radium may be beneficial in certain papillomata of the penis, some of which are very extensive, and where radical surgical procedure would create a tremendous deformity. However, in the malignant conditions, such as cancer, I am satisfied that either a partial amputation or total extirpation is the proper procedure, followed by deep cross-fire x-ray therapy of the adjacent lymph nodes.

I am in accord with Dr. Stang concerning the question of medical diathermy. We do not yet know the real value of this method of therapy. I believe it is essentially a symptomatic therapeutic procedure possessed of a very exact and efficient way of applying heat, and thereby accomplishing satisfactory results in many cases; so far as the treatment of the acute infections of the urethra is concerned, I have never seen nor do I know of any authentic reports wherein it has demonstrated itself to be of any real value.

Dr. Stang did not favor nephropexy. In fact, he believed that almost without exception, in his observation and experience, the patient had a return of symptoms sooner or later after the operation. I expect to say more about this subject in conjunction with the demonstration later this morning, on the question of movable kidney. I do feel there is a great deal that can be said upon the subject, and I believe that improvement or better technique in the operation of nephropexy may prevent some of these recurrences. I would caution very strongly against the removal of the pedicle clamp in nephrectomy in two or three days. I think it is much safer not to remove it until four or five days or even sometimes later. I know of one or two instances where fatal hemorrhage followed the too early removal of the clamp.

I was very glad, indeed, to hear Dr. Stang refer to the importance of the subject of urology in childhood. Certainly, there is probably no field in medicine, as far as the pediatrician is concerned, to which attention should be more particularly drawn, and has been drawn by the urologist, in defining those conditions so commonly encountered among children, who are subject to the same ailments and pathological lesions as the adult, with very few exceptions.

There are two other trends in urology today to which I would like to allude; firstly, that concerning the status of urologists and the welfare of patients. I refer to the effort to subjugate the cystoscopist or the urologist, making him a subsidiary of the general surgical profession. There certainly is a trend in many quarters in this respect, which I feel is not for the best interest either of urology or patients in general.

Secondly, there is the trend with which you are familiar, where the department of urology is an integral part or department of the hospital, with its separate ward, special head nurse, personnel of nurses and orderlies and internes, who are interested only in the field of urology. I am confident that just as soon as we have such a department in our major hospitals, as we have already provided in the case of gynecology, ophthalmology, etc., just so soon will we be able to do better work and provide better results for our urological patients. The progress and development of urology hinges upon this particular advance, which I am happy to believe is developing throughout the profession to better advantage and more extensively than is the other trend of making the urologist the hand-maid, as it were, to general surgery, by which act he is liable to lose his birthright as a urologist.

I hope some day that the fashion, if you can so call it, of styling the honorable specialty of genito-urinary surgery as urology, will be changed. The specialty of genito-urinary diseases is a very broad one, and to one so specializing a large heritage in the practice of medicine, and it is up to those interested in urology, so-called, to qualify themselves thoroughly and maintain their full rights in the realm of medical practice.

Too often, the urologist is merely a cystoscopist or venereologist. Of course, the mere cystoscopist is never a genito-urinary surgeon and therefore becomes an appendage, as it were, to the general surgical departments of hospitals. Under such a regime, urology has no opportunity for development and maintenance of its rightful place in medical practice. On the other hand, in many instances, the genito-urinary specialist is content to be a venereologist and therefore loses ninety per cent of his possibilities as a genito-urinary specialist in the broadest and proper sense of the word.

Dr. Sexton has already thrown down the gauntlet. I think it is a pity that there is so much controversy about Hunner's stricture of the ureter. One would think that up to seventeen years ago there never was such a thing as stricture of the ureter. As a matter of fact, I think every doctor, certainly all urologists, have recognized strictures of the ureter, both congenital and acquired, even before Hunner's epochal work. I feel that Dr. Hunner deserves all credit for repeatedly calling attention to the subject of stricture of the ureter, but I am one of the majority, I believe, in urology today who feel that the pendulum has swung too far on this subject. There always have been and always will be strictures of the ureter but we must be on our guard lest the matter be overdrawn. We must not be carried away by our own or the enthusiasm of others. We must remember the anatomical facts that the ureter, like the urethra, is a tube of very variable lumen, having its levels of normal constrictions, which may easily be interpreted as strictures by false methods of diagnosis.

It seems to me that the recent statements of Dr. Hunner are to be challenged in this respect. He has claimed that thirty per cent of the strictures of the ureter are associated with no abnormality in the urine. Personally, I have never seen a stricture of the ureter that did not show some abnormality in the urine, perhaps not on the occasion of a single examination but certainly on repeated urinalyses, and it seems to be almost impossible to conceive that a stricture of the ureter that could be productive of symptoms by virtue of urinary back pressure, would not cause early, at least, some congestion, and later, some evidence of infection in the kidney.

Another statement which seems to me to be overdrawn is that Dr. Hunner has come out very strongly and stated that every case of calculus of the kidney or ureter is not only associated with a stricture of the ureter, but that the condition is bilateral. Personally, I must take exception to that statement, as I have seen many cases of renal and ureteral calculis where no stricture of the ureter existed.

He has also called attention to the fact that when a woman patient directs her fingers down behind Poupart's ligament, and complains of tenderness or pain, which is aggravated at the time of menstruation, stricture of the ureter is to be strongly thought of. I admit it may be thought of, but not too strongly.

He has also stressed the fact that the falling down sensation in the pelvic region and enuresis in children is commonly associated with ureteral stricture. So I feel we certainly must not go too far with Dr. Hunner in his belief in this respect and that the evidence must be very carefully weighed.

I am confident that a number of cases diagnosed as ureteral stricture are not due to stricture at all, but the obstruction and symptoms are due to kinks of the ureter, incident to nephroptosis or movable kidney.

Dr. Sexton showed a very interesting ureterogram where he had an opportunity to check up on the diagnosis. I am satisfied that if a lot of the diagnoses of ureteral strictures were checked up, it would not be possible to demonstrate them either at operation or autopsy. In that event, you would find the enthusiasts of ureteral stricture claiming the condition to be one of spasm of the ureter. Evidence of stricture of the ureter, one would think, would depend upon the demonstration of a chronic infiltration or cicatrization in the coats of the ureter, which, as I understand the subject, pathologists have not been able to demonstrate with any regularity.

I feel that not only are many mistakes made in the diagnosis of ureteral stricture, where movable kidney by producing a kink may be the cause of any obstruction, but there are many instances where chronic appendicitis, pelvic inflammatory disease in the female, renal or ureteral calculi, etc., come into differentiation. There are other factors related to skeletal disease, as scoliosis, chronic spondylitis, osteophytes, or exostosis.

There are two or three factors which are common causes of errors in the diagnosis of stricture of the ureter. It is a great mistake to attempt to diagnose stricture of the ureter solely from a ureterogram or ureteropyelogram. Dr. Hunner is right in his insistence that it should be made by the bulbous bougie. The bougie is the truest method of diagnosis of stricture, and even then false results may be obtained, due to the fact that the bulbs employed, sometimes are unduly large. As stated previously, the ureter must be regarded a good deal in the light of the urethra. We all know the urethra is a canal with three distinct points of constriction and three levels of dilatation. In the case of the ureter, there are four points of constriction, alluded by Dr. Sexton, but not particularly stressed: one, at the junction of the ureter with the kidney pelvis; a second, where the ureter crosses the pelvic brim, the third, where it enters the bladder wall, and the fourth, the vesical portion just before it emerges through the mucosa of the bladder. It is customary to regard the urethra as a tube with a normal caliber of 27 French. But I dare say the majority of the gentlemen in this room could not, or would not, tolerate the passage of a sound or bougie of that calibre because of the normal constrictions of the urethra. For instance, a 23 F. external urinary meatus is normal although not the average. Just so is a 25 F. anterior urethra or a 30 bulbous, or a 27 membranous, or a 35 prostatic urethra. The same variability exists in the lumen of the normal ureter, and I fear the enthusiasts of ureteral stricture are overlooking some of these normal constrictions of the ureter. Even though a ureter may not be able to take a number 11 or 13 F. bulb, nevertheless it may be perfectly normal. The constrictions in some cases may be smaller than the average although not abnormal, yet sufficient to produce tugs or hangs when oversized bulbs are withdrawn.

It is easy to obtain a "hang" when you draw a large bulb through the most constricted lower end of a normal ureter. Therefore, I believe that the diagnosis of stricture of the ureter should be made not only by the ureterogram, but also by bulbous bougies if one is to avoid mistaken diagnoses in many cases.

Dr. Stang asked me to say something about vasotomy for medication of the seminal vesicles. The introduction of vasotomy or vasostomy, by Belfield, is a commend-

able surgical procedure, if for no reason other than to save many patients the ordeal of seminal vesiculotomy or vesiculectomy. Obviously, there is a definite small group of patients where these surgical operations are indicated. The modification of Belfield's operation that I suggested about fifteen years ago is known as vasopuncture, namely puncture of the vas with a syringe needle and its injection with collargol or other germicide for medication of the vesicles. I believe vasopuncture is superior to vasotomy or vasostomy in that it accomplishes just as much, therapeutically, as the latter procedure, the incidence of mixed infection is diminished or reduced to nil, and there is no danger of resultant stricture or obstruction of the vas if the proper technic is carried out. Belfield, in recent years, has styled his operation vas puncture, although he still continues to use a bistoury to enter the vas, which makes the operation a vasotomy, not a puncture.

We have never observed an obstruction of the vas following vasopuncture, but have seen strictures after vasotomy, and, a few years ago, in experimentation on dogs, we had only one case of stricture develop as a result of vasopuncture, which was the first one done, due probably to an error of technic; whereas, by vasotomy, using the bistoury, we obtained strictures in fifty-five per cent of the dogs. Therefore, I believe vasopuncture is a safe procedure and can be repeated in a given case, if necessary. If the operation does no good, so far as medication of the vesicle is concerned, it certainly does no harm, even though the results may not be glorifying.

I was very much interested in Dr. Fletcher's paper. I feel that crippling of the kidneys by catheterization is unduly feared by him. I do not know why he is so pessimistic. Unquestionaly, if a patient walked into my office, suffering from complete retention of urine, my last thought would be to catheterize him and allow him to go home immediately afterwards. I think such a patient should be hospitalized from the start and kept under the continuous supervision of the doctor who passes the catheter. If that is done under rigid asepsis, associated with proper antisepsis of the urethra and bladder, I do not see why an ascending infection of the kidney should be so common and so feared as it is by Dr. Fletcher.

Cases of dislocation and fracture of the spine, with injury to the cord, resulting in paralysis, present a problem as to the best management of their urinary retention. Cases have been reported in the literature, where bladders have ruptured from over-distention. Certainly, if the bladder does not rupture these patients become acutely ill, and it is a question whether the danger from kidney damage, on account of back pressure, is not as harmful as the feared danger from infection incident to catheterization. I believe the danger is not great if the catheterization be carried out in a well organized hospital under perfectly aseptic conditions, with proper technic. On the other hand, on the battlefied or elsewhere, where there is a question about the proper asepsis, a catheter should never be passed, or not until the patient is moved back to the casualty clearing station or base hospital where strict asepsis and antisepsis can be practiced. I believe if proper periodic or continuous catheterization is carried out, and the catheter changed every other day and the bladder and urethra irrigated, that cases of ascending infection of the kidney should be almost nil.

Concerning the query as to urologic mistakes, I have the following to suggest. One of these, I believe, is routine ligation of the vas as a preliminary procedure to prostatectomy. I have not observed epididymitis as a complication of prostatectomy in more than ten per cent of cases. I think the reason why epididymitis follows prostatectomy so frequently is neglect to maintain a perfect hygiene of the bladder following the operation, thereby preventing the bladder from becoming a cess-pool of infection, from which bacteria will travel either upward toward the kidney or down the vas, causing epididymitis on the slightest provocation, particularly if instrumentation, which is commonly the case, is practiced too early following prostatectomy.

Another common urologic mistake is prolonged irrigation of the bladder, so frequently carried out by practitioners, for cystitis of an unknown cause, without submitting the patient to a thoroughly urologic investigation. Many such cases are due to tuberculosis and procrastination is inexcusable.

Other mistakes are the too early, vigorous and frequent prostatic massage; another is the catheterization of the ejaculatory duct per urethram, a procedure absolutely unnecessary; another is routine two-stage prostatectomy when the operation can and should be done at one time in 80 per cent of cases; another is for any surgeon to operate all cases either suprapubically or perineally—more discrimination and the employment in the given case of whatever route is indicated by the pathology present will improve both mortality and morbidity results; another is disregard of the various cardiovascular disqualifications; another is forcing prostatectomized patients out of bed too early; another is catheterization of the healthy ureter and kidney in the routine diagnosis and management of tuberculosis of the kidney; another is ether anesthesia, if avoidable, in nephrectomy for tuberculosis—this should be done routinely under spinal, para-vertebral or gas anesthesia; another is the routine employment of the lumbar rather than the trans-peritoneal approach for nephrectomy, in tumor of the kidney; another is surgical attack, first on the lesser diseased of the two kidneys in the case of bilateral nephrolithiasis, and, indeed, operation at all in such cases, unless the better kidney is functionally sufficient—nephrolithotomy, however, may be successfully carried out in the case of a single kidney, if that kidney is shown to possess extraordinarily good function; finally, there is the failure to suspend the kidney following an operation for nephrolithotomy, particularly in those cases where nephroptosis has been a cause for urinary retention and stone formation, or where the kidney, following surgical mobilization is unable to maintain its normal position, hence predisposed to further calculous formation.

I am sorry that lack of time will prevent me from discussing Dr. Wooll's paper, as it has been of unusual interest to me. (Applause)

Spinal Anesthesia; With Remarks on Volume Control Technic*

By RICHARD B. STOUT, M. D., and GEORGE H. EWELL, M. D.
Madison

Much has been written on spinal anesthesia, especially within the last few years, but there still exists considerable skepticism on the part of the medical profession as to its safety and reliability.

A technic has been developed, by means of which it is possible to control the height of anesthesia on the trunk within practical and reasonable limits, and at the same time to avoid most of the wide variations in blood pressure frequently encountered in anesthesias extending high enough for upper abdominal surgery.

HISTORICAL

The history of spinal anesthesia began with the attempt of J. Leonard Corning, a neurologist, in 1885 and again in 1888 to relieve the pain of a diseased spine by injections of cocaine. (1.)

Quincke, in 1891, was the first to withdraw spinal fluid by lumbar puncture, (2) and August Bier in 1899 was the first to successfully introduce cocaine into the spinal canal. (3) Tait in 1899 used intradural injections of cocaine for surgical anesthesia, and although the method enjoyed a brief popularity it was soon abandoned because of frequent disastrous results. (4) With the discovery of the less toxic drug stovaine by Fourneau in 1903 and novocaine by Einhorn in 1904, spinal anesthesia was again attempted with more favorable results.

PRESENT STATUS

To date more than 100,000 spinal anesthesias have been recorded in the literature. The majority of these have been administered in a few large surgical centers. Surgeons elsewhere, not fully realizing its numerous advantages, have not familiarized themselves with its technic.

Most of the recorded accidents with spinal anesthesia have been due to an insufficient understanding of the hydrodynamics of the spinal fluid, and of the technical procedures involved. Lack of preparation to meet the emergencies which may arise have added an occasional fatality.

The majority of reported deaths after spinal anesthesia were among patients moribund at the time of operation and undoubtedly would have occurred with any type of anesthesia. Against these few deaths may be counted many cases in which any other form of anesthesia would have been fatal, which have survived major surgical procedures under spinal anesthesia.

Campbell in 1925 made the following statement, "In spite of numerous obstacles hindering its more general adoption, a careful study of the subject convinces one that spinal anesthesia is rapidly gaining from year to year . . . Chief among these obstacles is a prejudice wrought of ignorance of the method and its proper usage." (5)

PHYSIOLOGY

When the anesthetic agent diffuses upward in the dural canal to a level necessary for abdominal surgery, the rami-communicantes are paralyzed, thereby functionally paralyzing the corresponding sympathetics. This allows dilatation of the splanchnic vessels and the accumulation in them of large amounts of blood. If the anesthesia is high and the splanchnic dilatation extreme, a considerable fall in blood pressure follows with the signs of cerebral and bulbar anemia, (pallor, nausea, vomiting, profuse perspiration and soft, rapid pulse.) Cerebral anemia thus produced may be overcome in most cases by placing the patient at once in extreme Trendelenburg position, thus allowing the blood to gravitate to the brain. (6) A physiologically more rational procedure is the stimulation of the end-organs of the functionally paralyzed sympathetics by the drug ephedrine. (7) The latter method allows the position of the patient to be changed to suit the convenience of the surgeon.

EPHEDRINE

Ockerblad and Dillon in 1927 first used ephedrine to combat the fall in blood pressure incident to spinal anesthesia. They first gave it by mouth, then hypodermically, after the blood pressure fell 10%. Its prophylactic use before administration of the spinal anesthesia was then suggested and has remained the method of choice. (8)

GRADED DOSAGE OF EPHEDRINE

As the height of the intradural spinal block produced determines the number of rami-communicantes and hence sympathetic ganglia paralyzed, the blood pressure fall after the customary prophylactic dose of three-fourths grain of ephedrine has been found to be directly proportional to the height of the anesthesia. This suggested the use of one-half or one fourth grain doses in the lower

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anesthesias and one grain doses when anesthesia was to be produced to the nipple line.

HYPERTENSION AND HYPOTENSION

It has been noted that the greatest blood pressure fall in spite of the prophylactic dose of ephedrine occurs in hypertensive cases with sclerosis. The explanation may be offered that while the peripheral vessels may be palpably sclerotic, the splanchnic vessels are rarely as markedly so. As ephedrine is a peripherally acting vaso-constrictor, its stimulation in sclerotic cases is relatively ineffective and as the less sclerotic splanchnic vessels dilate with onset of anesthesia a great fall in blood pressure is usually experienced. This suggested the use of larger doses of ephedrine or the addition of a small dose of adrenalin. The latter therapy has been used successfully in the few cases encountered in this series. Cases of functional or essential hypertension (not encountered in this series) would on a theoretical basis be given a smaller dose of ephedrine. Hypotensive cases may be handled by an increased dose of ephedrine which will raise their pressure to a safe level during the anesthesia.

TECHNICS USED

In our early cases, various technics as recommended by others, were successively tried with satisfactory results in most instances, but were lacking in the important features of a definite control of height of the anesthesia. (6) (9)

The method of Pitkin was used in thirty-five cases but was abandoned because of the occurrence of severe post-operative headaches in a large proportion of the cases. These headaches have never occurred in our cases when novocaine crystals were dissolved in the spinal fluid and re-injected.

VOLUME CONTROL—THEORY

In a series of two hundred cases, using a technic to be described, it has been found possible to produce a spinal, or intradural radicular block anesthesia, which can be accurately controlled as to height of anesthesia on the trunk, within the extreme limits of the pubis and the clavicle. This technic does not involve the introduction of any foreign substance other than novocaine into the spinal canal and its success depends upon an understanding of the hydrodynamics of the spinal fluid rather than the effect of gravity upon light or heavy solutions of novocaine. Nothing has been introduced to prevent diffusion of the drug within the spinal canal, as it is possible with an understanding of the physical principles governing this diffusion, to control it accurately enough for practical purposes.

This technic differs from all others reported in the literature in that the volume of spinal fluid-novocaine solution introduced is varied according to the height of anesthesia to be produced. The other factors influencing diffusion, cerebrospinal fluid pressure, speed of injection and position of the patient, are not varied.

UPWARD EXTENSION OF ANESTHESIA

1. *Is directly proportional to the volume of fluid injected.*

   The larger the volume of fluid injected, all other factors remaining constant, the higher will the anesthesia extend as a direct result of volume displacement from below.

2. *Is directly proportional to the speed of injection.*

   The more rapid the injection, the greater the upward diffusion of the anesthetic agent due to eddy currents, forcible mixing, etc.

3. *Is inversely proportional to the cerebrospinal fluid pressure.*

   The diffusion of any two liquids under pressure is slower than under decreased pressure. It may easily be seen that when unmeasured quantities of cerebrospinal fluid are allowed to escape, the pressure is reduced an unknown amount, diffusion proceeds to a higher level proportional to the decrease in intraspinal pressure, and the anesthetist is unable to predict the resultant level of anesthesia.

4. *Depends upon the position of the patient's body only when there exists a difference in specific gravity between the solution injected and the spinal fluid.*

This is the principle upon which Pitkin's original method theoretically depends (10), but as has been found by experience and as is emphasized in his latest article, expansion of the volume of his solutions by barbotage is necessary to control the level of anesthesia, (11) thus bringing into play all of the foregoing physical considerations.

The addition of glucose to the novocaine-spinal fluid solution increases its specific gravity and aids limitation of anesthesia to the perineum as is used in obstetric, perineal and rectal cases.

The height of injection has apparently had only slight effect on the level of the anesthesia. The

second or third lumbar space is usually selected for injection.

INDICATIONS FOR SPINAL ANESTHESIA

Indications for the use of spinal anesthesia which in the past included only those bad risk cases which would undoubtedly be lost through the use of any inhalation anesthetic, may now be extended to all cases coming to the operating room for surgery below the diaphragm.

CONTRA-INDICATIONS

Hypotension, which in the past was a formal contra-indication to spinal anesthesia, may now be successfully overcome by the judicious use of ephedrine. Dehydration, which is a contra-indication to surgery, may be effectually overcome by the subcutaneous or intravenous administration of fluid.

COMPLICATIONS

The most common immediate complication of spinal anesthesia is a slight to moderate fall in blood pressure, usually accompanied when below 85mm systolic by nausea and occasionally vomiting. Small doses of adrenalin (1-3 minims intramuscularly) have been found to effectively raise the blood pressure and quickly relieve the nausea. Nausea has also been noted after forcibly pulling on the mesentery in high abdominal operations even though surface anesthesia extended to the second rib. These sensations are probably carried by way of the vagus which might be blocked by local infiltration at the esophageal hiatus.

Convulsions are reported in the literature to have followed injection of novocaine into the venous plexuses around the cord. Careful lumbar puncture and the administration of ten grains of sodium barbital by mouth 1½ hours preoperatively will prevent this occurrence. (12)

Respiratory and cardiac failure have been reported with the higher anesthesias but have not been encountered in this series. Of great interest in this connection is the work of Jonnesco (13) and of Koster (14) who have produced general surgical anesthesia, by the intra-dural injection of novocaine and neocaine, permitting operations on the head, neck and thorax, without the occurrence of respiratory or cardiac failure.

Post-anesthetic headaches may occur due to withdrawal or loss of large amounts of spinal fluid, either at the time of puncture or later through a gaping puncture wound made by a large needle. Needles of 20-22 gauge, with a short bevel, obviate this difficulty.

Meningismus, which is the result of the injection of a sterile irritant into the spinal canal, may follow the use of imperfectly cleansed syringes or needles.

Meningitis is due to contamination of solutions, syringes or needles.

Transient paresthesias are reported to occur, usually being limited to the perineum or legs, and are usually caused by trauma to the nerve roots of a large calibre, long beveled needle. (15).

FAILURES TO OBTAIN ANESTHESIA

Most authorities on spinal anesthesia admit a failure to obtain anesthesia in 5 or 6 per cent of their cases. Two explanations of failure may be offered. First, that the injection of novocaine was extra-dural. Second, idiosyncracy to novocaine. The first explanation seems to be the most likely as in three cases in this series after complete failure to produce anesthesia, a second injection was made by the same operator and a satisfactory anesthesia obtained.

BENEFITS OF SPINAL ANESTHESIA

Relaxation of the abdominal wall which is more complete than that obtained under another anesthesia, is appreciated by the surgeon in any case, but especially so in cases of ruptured viscera, such as a ruptured gangrenous appendix or perforated gastric or duodenal ulcer. The necessary surgical procedure may be carried out without disseminating infective material throughout the surrounding peritoneum by fighting the labored respiratory efforts of an "ether patient" and forcibly packing away distended intestines.

The intestines under spinal anesthesia are contracted, owing to preponderance of vagus or parasympathetic tone in the absence of sympathetic inhibitory stimuli. The abdominal walls may be retracted upward with only slight traction, and the entire abdominal cavity may be inspected before any manipulation. This condition of "abdominal silence" is a revelation to the surgeon not accustomed to spinal anesthesia, and has been termed a "surgical paradise" by a recent convert to the method.

Spinal anesthesia constitutes an effective block to pain sensations originating in the operative field and hence removes this possible causative factor in the production of shock. (16) Surgical shock has not occurred in this series of cases.

There is little or no post-operative nausea, vomiting or distention, therefore less strain on the suture line. This results in less pain in the region

of the incision and less chance of occurrence of post-operative hernia. (17)

Paralytic ileus has been overcome by the use of spinal anesthesia to interrupt the reflex sympathetic inhibition of peristalsis which characterizes this condition. (18) (19) (20)

Post-operative respiratory complications occur one seventh as frequently as after inhalation anesthesia.

No demonstrable kidney or liver damage has ever followed spinal anesthesia.

The patient is able to take fluids and food before, during and immediately after operation. Catheterization has thus been much less frequent in this series of cases than after ether anesthesia.

The appreciation of the patient who has previously had an ether anesthetic demonstrates that from his viewpoint, the method is commendable. (17)

TECHNIC

One of us (R. B. S.) has carried out the experimental work on methods of controlling the level of anesthesia, but as this work is still in the developmental stage, it will be made the subject of a further communication now in preparation.

CONCLUSIONS

Spinal anesthesia, when skillfully administered, provides complete absence of pain, complete relaxation, and adds greatly to the ease and rapidity with which any surgical operation may be performed.

Convalesence after surgery done under spinal anesthesia is attended by far fewer complications and enjoys a definitely lower mortality rate than after inhalation anesthesia.

Spinal anesthesia is rapidly growing in favor, and in time, will be used more than inhalation anesthesia.

In a series of two hundred cases, using a volume control technic, it has been found possible to produce anesthesia to any desired level on the body without resorting to the introduction of any foreign substance other than novocaine into the spinal canal.

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Ureteral Obstruction in Infancy

Meredith F. Campbell and John D. Lyttle, New York (Journal A. M. A., Feb. 16, 1929), made a study of seventy-four cases of ureteral obstruction in infancy. They report that approximately 2 per cent of infants suffer from ureteral obstruction which predisposes to infection and renal destruction. That pyuria which resists systematic therapy for more than four weeks indicates complete urologic investigation. With this as the criterion, the authors have disclosed gross urinary tract disease in more than 95 per cent of the patients whom they examined. The same urologic, diagnostic and therapeutic procedure followed in adults should be employed for children and infants except when rendered impossible by the small caliber of the instruments.

THE JOURNAL CLINIC

Diagnostic Problems

By L. M. WARFIELD, M. D.
Milwaukee

A boy 14 years old taken suddenly with an acute illness which seemed to be influenza at first but which did not clear up at the usual time. There was leukocytosis, pain over lumbar vertebra with swelling of the right side muscles of the back, some stiffness of the neck and Kernig's sign. The illness had lasted about a week. The urine was negative.

DISCUSSION

This case at first sight suggested the possibility of a meningitis or of an osteomyelitis of the lumbar vertebra. The question also arose as to the possibility of there being a perinephritic abscess. It was a very puzzling case. Very excellent x-ray pictures of the spine were obtained both anteroposterior and lateral views and it was seen at once that there was no involvement of a lumbar vertebra. On the anteroposterior view one could see the line of the psoas muscle on the left side. On the right side it was obscured but there was no shadow which suggested very strongly a perinephritic abscess. When one took into consideration the length of the illness and the history of the illness it did not appear that the boy was suffering from meningococcus meningitis. Tuberculous meningitis was a possibility but in the absence of pupillary changes and with a perfectly regular pulse in such a healthy boy, it also appeared unlikely. It looked much more like meningeal irritation but in order to eliminate meningitis a spinal puncture was done. The fluid was under no pressure it was clear and there were only 5 cells to the cubic millimeter. This definitely ruled out meningitis. Further leukocyte counts showed 15,000 and 17,000. The urine contained a faint trace of albumin but no casts. The temperature on one day reached 102.8 but gradually fell to normal after about five days. In the meantime the acute tenderness over the spinous process disappeared and gradually the swelling of the muscle and the tenderness over the muscle disappeared under the influence of continuous heat, so that when he was discharged he appeared to be perfectly normal in every way.

The final diagnosis was acute myositis without suppuration. No other diagnosis seemed to fit the case in all its aspects. Evidently he had some meningeal irritation and probably the acute tenderness over the vertebra was an extension of the inflammation from the muscle along the ligaments. The source of infection still remains a little obscure, although it seems probable that the furuncle on his chin had left some organisms circulating in his blood. He had some slight impairment in his back which made it a focus of lessened resistance, and under the strain of exercise the organisms lodged at that point. The case to me was a most instructive and interesting one and I hope it will prove interesting to the readers of this Journal.

A NEW PROBLEM

A Jewish woman, aged 49, had been given up to die on April 8, 1928. One week before she had been seized with a violent occipital pain associated very soon with a so-called paralysis of the right leg and left leg of only six hours' duration. Sugar was said to have been found in the urine at the onset. At first there had been slight vomiting. Temperature had been rising, ranging between 101 and 102 for several days. Of all the symptoms headache had been the most constant and ever increasing factor, requiring morphine for past day or so.

For one year previous to the present illness the husband stated that the patient had been subject to sudden unaccountable attacks of screaming and tearing at her hair. Menopause had also occurred about one year ago when patient had had treatment for associated "high blood pressure". Save for typhoid fever, years before, the patient had been in excellent health. There was no family history of diabetes or tuberculosis.

When examined in the early evening of April 8, 1928 the patient could not be roused. Four hours later she moved her extremities and tongue as directed and distinguished number of fingers held before her eyes and then would fall back into a semi-stuporous condition. Pupils were at first equal and active but later became unequal and sluggish. At times the right eyeball would

roll up and out and the left down and out. Ptosis of right upper eyelid and some twitching of right side of face was present. Ophthalmoscopic examination revealed only some haziness of the disc margins especially to nasal side. The throat and ears were negative as was the thyroid. No general glandular enlargement was made out. The heart was slightly enlarged. Blood pressure was 125/80. Arteries were moderately thickened. Breath sounds were distant throughout. A few moist rales were heard at both bases. Abdomen was negative save for obesity. Pelvic examination was negative. Deep and superficial reflexes were present. No paralyses were noted. Cranial nerves were intact. The neck was moderately rigid but Kernig's sign was not positive. Temperature for next three days in the hospital ranged from 102 to 103 with very little remission. The pulse at this time remained at 85, and respirations at 20 and regular.

Urine was negative as was blood Wassermann. Fasting blood sugar was 154 mg; C O_2 reserve was 66 per cent. Red blood cells were 5,030,000; hemoglobin 80%; white blood cells 19,350; 74% P. M. N. The spinal fluid was not under increased pressure but was a faint pink and the W. B. C. were 500 with 34% lymphocytes, while R. B. C. were fairly numerous. No microorganisms were seen. The spinal fluid Wassermann and mastic were negative. Blood culture was negative.

Skull x-rays showed no intracranial pathology save some increased density in ethmoid and sphenoid regions.

Enteric Cysts; A Case Report

By J. A. JACKSON, M. D., Section on Surgery
and
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Jackson Clinic, Madison

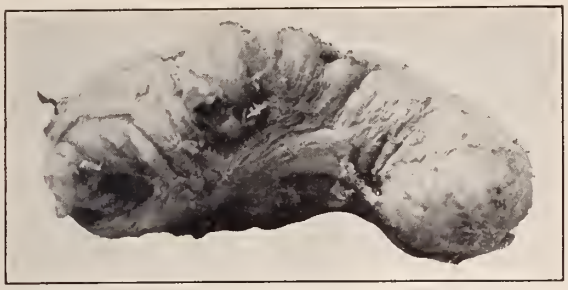
Enteric cysts belong to the surgical rarities. A diagnosis is usually made at the time of operation as they are very difficult to diagnose clinically. A great many of them have been thoroughly studied and reported from the pathological standpoint. From the clinical standpoint they are only of interest in that they have been known to cause volvulus, intestinal obstruction and vague abdominal syndromes in which the first clinical complaint is usually pain of some kind.

The removal of the majority of enteric cysts is relatively simple, however, in some cases formidable surgical procedures are required. If the cyst remains in the intestinal wall a resection is sometimes necessary. It is only rarely that the cyst is so located that the blood supply of the bowel must be sacrificed in removing the cyst so that resection is again indicated.

Pathologically, enteric cysts belong in a well defined group of intraperitoneal cysts. They are single or multiple, large or small and usually are found along the lower end of the ileum in the wall of the bowel at the point of Meckel's diverticulum, in the mesentery, or near the umbilicus. If they originate within the muscular wall of the bowel they usually remain connected with the bowel and are inclosed by a muscular wall. If the cyst arises beneath the subserosa they usually are on the convex side, and if on the concave side they ordinarily project into the mesentery. The cavity is usually single and the contents are brownish, yellowish or a colorless mucinous fluid. The wall resembles that of the intestine and may contain smooth muscle, mucosa, lymphoid tissue and a lining of cylindrical or cuboidal epithelium. Secondary changes in the cyst may destroy the epithelial lining and changes in the muscular coats also may occur.

The modes of origin of enteric cysts are many. They may originate from Meckel's diverticulum and in those cases they usually are at the lower ileum; those which occur in the vicinity of the umbilicus are considered by some to be remnants of the omphalo-mesenteric duct. They may arise from misplaced portions of intestine.

M. G., a girl aged six, was referred by Dr. C. M. Wahl, of Spring Green, Wisconsin, to the Jackson Clinic. She was first seen at the Clinic May 20, 1928. Her mother stated that for the past two years the child had had intermittent attacks of nausea, vomiting and abdominal pain. During these attacks her temperature was slightly elevated; the attacks occurred at three or four months' intervals and lasted from five to six days. The pain usually was referred to the umbilicus or to the right lower quadrant. Between attacks the child was well although appetite has never been especially good. Three years before admission to the Clinic the family physician noted an abdominal mass which



has remained practically the same size during the entire three years.

A family history and past medical history were negative. The general physical examination aside from the presence of the abdominal tumor was essentially negative. The abdominal examination showed no tenderness, no rigidity, no distention; there was a visible tumor in the upper right lateral quadrant and on palpation the tumor was not tender. It was firm and freely movable to the examining hand; it gave one the impression of palpating a kidney. The mass was about 9 cm. in length by 4 cm. in diameter. A notch on one side could be definitely made out. Inasmuch as the mass felt like a floating kidney, a cystoscopic examination was done; this showed normal kidney function and a bilateral pyelogram revealed both kidneys in normal position. The laboratory and other x-ray examinations were negative. A clinical diagnosis of omental cyst was made and operation advised.

On opening the abdomen May 28, 1928, Dr. J. A. Jackson found that the cyst was lying in the transverse mesocolon with the middle colic vessels passing over it. The vessels could be separated from the cystic tumor mass; there was no connection between the cyst and the bowel proper.

The tumor was shaped like a sausage and measured 3 inches by 1½ inches. It presented the appearance of the intestinal wall from which the serosa had been removed in that the very definite longitudinal and circular layers of muscle fibers could be made out. It was filled with a brownish mucinous fluid; the lining of the cavity was perfectly smooth; there were no papillary projections of any kind.

Microscopic sections showed two muscular layers but the epithelial layer was almost destroyed. No crypts or lymphoid tissue were found in the sections. Whether this cyst arose from the remnant of the omphalomesenteric duct or is of the type which arises from a misplaced portion of intestine; would be hard to say; from the pathological picture it probably is the latter.

Conjoined Twins; A Case Report

By E. B. PFEFFERKORN, M. D.
Oshkosh

On June 22nd of this year I was hurriedly called to see a patient in her home. On arriving I was informed that I was too late; that the baby had just come. The accompanying photographs are of the specimen which I found.

The mother, age 23, of German descent, married 1 year, a primipara, stated that she estimated her pregnancy of six months duration with no unusual antenatal history. The father, age 25, also of German origin, appeared in good health and gave a history of average good health. The mother's father and mother are both living and well, ages 50 and 52 respectively. She has three brothers and three sisters living and well. No history of twins in either the patient's family or that of her husband.

Routine inspection of the fetus, which I found in the chamber, where, I was told it had been passed, the patient thinking her bowls were moving gave me quite a surprise.

A male fetus of approximately 6 months development, normally developed and well nourished; the appendages normal in every respect, except the left ear which had an opening behind the auricle as well as in front. Fingers and toes were well formed. Nails were present. Both testicles were in the scrotum. Protruding from the thoracic wall and epigastric region was the trunk of a second fetus with buttocks, male genitalia and normally developed lower extremities, except for ankylosed knees and ankle joints. The left shoulder and arm protruded from near the thoracic wall of the larger fetus and ended in two deformed fingers. No head, neck right shoulder or arm were present. A single umbilical cord was inserted at the usual site of the larger fetus, and except for being thicker than usual at the site of insertion, it was normal in length and appearance, ending in a single placenta which was also normal in size, shape and appearance. Between the insertion of the umbilical cord and the protruding portion of the parasitic fetus was a protuberant mass, round

in shape, relatively large, and soft in consistency, apparently intra-abdominal.

The parents readily consented to my request to take the specimen with me for further study. A stereoscopic x-ray picture revealed no abnormal bony findings nor any evidence of the missing head or right upper extremity, nor was a second spinal column demonstrable. No additional information was obtained concerning the aforementioned protuberant mass.

Instances of asymmetrically fused twins are familiar to us all among lower animals as well as in man. The literature on this subject is fairly replete with instances in practically every form of development and fusion so that they have been classified. This form which is called an asymmetrical double terato-thoraco parasitus by Ballantyne is acceded to be relatively of rare occurrence. I was able to find only two similar cases in the literature, a Chinese, named Ake, and an Indian boy named Laloo, both of whom lived and were exhibited in museums.

Toxic Dermatitis Due to Mercurochrome Absorption; Report of a Case

By JOSEPH W. LAMBERT, M. D.
Antigo

Mrs. P. M., age 21, blond para 11, was seen two days following a deep laceration of the left hand which extended about 6 cm. along the hypothenar area. She had cut her hand on a barb wire fence and had applied an ordinary 1% commercial solution of mercurochrome and a gauze dressing. At this time she was seven months pregnant and had declined medical attention fearing the shock of suturing would induce premature labor. There developed within a few hours a papulo-erythematous rash over the entire dorsum of the hand extending just above the wrist, becoming rapidly vesicular and within forty-eight hours the entire hand presented a bullous appearance. When she applied for attention the involved area above the wrist was sharply demarcated from the healthy skin above. Later, however, the entire area became erythematous. No signs of infection were present. Considerable serous fluid was aspirated from the bullous area.

About seventy-two hours after the accident there appeared a similar rash, passing through

identical stages on the opposite hand and proximal forearm, though the involvement was not so marked, also a sharply demarcated area, papulo-erythematous, over both breasts from the manubrium to the ensiform. The latter receded without further progress and all involved areas desquamated within about a week, responding to the usual therapeutic measures of an exudative dermatitis.

There was no temperature, blood count and smears were normal, but the urine showed a trace of albumin. Previous and subsequent prenatal observations were negative. She delivered a normal child at term.

The development and extension of this rash directly from the mercurochromized area in the laceration leads one to the conclusion that absorption and idiosyncrasy to the antiseptic were the probable etiological factors.

TUBERCULOSIS and OTHER CHEST CONDITIONS

Excluding Tuberculosis

By OSCAR LOTZ, M. D.
Milwaukee

At the last meeting of the American Medical Association Dr. Stovall, Director of the State Laboratory of Hygiene, presented a most interesting paper on "Fungus Infections of the Lungs." While this form of pulmonary infection is not as common in Wisconsin as in some of our southern states, the work of Dr. Stovall is sufficient evidence to assure us that we must bear in mind the possibility of a fungus infection whenever we are attempting to solve a pulmonary problem.

Years ago, when the diagnosis of pulmonary tuberculosis was largely dependent upon the presence of well marked physical signs plus the presence of tubercle bacilli in the sputum, the question of differential diagnosis was a relatively simple one.

Today, in spite of—or rather because of more knowledge of physical signs, because of more accurate laboratory methods and because of the valuable aid given by the x-ray, the problem of differentiating lesions of lungs is becoming increasingly complex. To this must be added the fact that the public, recognizing that "early discovery makes for prompt recovery," is today demanding a much earlier diagnosis of pulmonary tuberculosis than was considered possible in the "good old days."

Many conditions may at times simulate pulmonary tuberculosis. To distinguish minimal or incipient tuberculosis when physical signs in the lungs are vague and indefinite, from an early thyroid toxicosis, or from a chronic sinus infection or a low grade infection of some other part of the body, is by no means always a simple problem. Even when very evident pulmonary pathology is present, and although advanced tuberculosis would be the most likely diagnosis, we are not justified to draw this conclusion until we have definite microscopic proof, or have eliminated all other possibilities. Primary carcinoma, syphilis, bronchiectasis, abscess, pneumokoniosis or fungus infection may produce physical signs indistinguishable from those produced by the tubercle bacillus.

The "snap shot" diagnosis too frequently leads to disaster but a careful, systematic examination including a detailed history, a thorough physical examination and the necessary laboratory tests will, in the majority of cases, reveal the true nature of the disease.

I believe much time can be saved and some errors prevented if the tuberculin test were used more frequently. With a few exceptions, a "negative" tuberculin test will exclude the most common chronic pulmonary infection—tuberculosis. While, of course, conceding that many minimal cases of active tuberculosis will show a repeatedly negative sputum, it seems hardly fair to the patient to continue to treat him for tuberculosis unless tuberculous infection is shown to be present by a positive tuberculin test.

In Cardiac Hypertrophy

Experimental and clinical observations have led J. A. E. Eyster, Madison, Wis. (Journal A. M. A., Dec. 15, 1928), to the conclusion that the most important factor leading to the cardiac hypertrophy that develops in organic cardiac or vascular disease is not increased work of the muscle per se but the muscle injury and the reaction to injury that results from abnormal stretching of the muscle in the initial period of overload as the lesion develops.

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EDITORIALS

THE SHELDON PRIZE

IN ANOTHER part of the Journal, announcement is made of the Charles S. Sheldon Prize. The House and Council hopes this step will meet with the approval of the whole membership of the State Society. The opportunity thus to honor Dr. Sheldon who has so long been an active and enthusiastic worker for the Society is welcomed. At the same time, it is hoped some author will come forward and by constructive and original ideas point the way toward a wider usefulness of the man in general medical practice. In these days of organization, clinics and the necessary development of the specialties the family physician, as we all recognize, has lost much of the old time confidence and authority that was once his reward for being the physician, counselor, and friend of his patients. Whether the future will see him reinstated or whether he will have to undergo a metamorphosis and take up a new relationship to his families is the matter on which the Council hopes to get some new light.

The profession is having a hard time in letting go the old and is afraid to enter "fresh fields and pastures new." We are conservative and wish to look before we leap; we have not been real pioneers in developing new methods and new devices in this age of new and rapidly developing social relationships. The adjustment which must be made should be made from within the profession and should not be crowded upon us by Social Workers, Politicians or Public Health Authorities. We must take the leadership and not drag back against an inevitable change in medical practice. Our leadership must be bold and statesmanlike. It must ever bear in mind the greatest good of the greatest number.

May we hope for some constructive ideals from the profession and the young men who will soon be the leaders and to whom we must pass the torch? All success to the launching of this new venture of the Society, the Charles S. Sheldon Prize! *H. P. G.*

CASE WORK

THE CRUSADER of February, 1929, has a short but telling story, ("Whose Responsibility?") of a case of overlooked tuberculosis which is of a type probably more common than is recognized. But it is not on that account that we urge physicians to read the popularly written narrative.

The author, it seems to us, has set forth very simply and very naturally an adjuvant to medical service not employed as frequently as it should be. For some reason, hard to fathom, hospital or medical "social service" has not "taken" as well as it promised to do when originally devised. And it was advocated and established by a physician, if we are not mistaken.—Dr. Richard Cabot.

The writer might have stressed the consideration that in unearthing a couple of hitherto unsuspected cases of tuberculosis, she was incidentally responsible for putting one of them under the treatment of a private physician. Doubtless this patient has properly paid several well spent fees to

the doctor for the supervision. But this aspect is passed over by the social service worker as of small moment. But it should not be by physicians who wish, at the same time, to increase their earnings and improve the character of their own medical service.

We know that it took several generations to bring the hospital to its present state of respectability. And it also required a long time to establish nurses as an indispensable "arm of the service." The laboratory technician has "arrived" quite rapidly.

But good social-service-case-work, both as an aid to diagnosis and thence to social adjustments as a part of the therapy (often as needful as surgical intervention) has not acquired much respectability as yet. *H. E. D.*

THE TONSILS IN RHEUMATIC FEVER

WITHIN the past two years there has been an intensive study of rheumatic fever in its relation to heart disease by groups of workers at various places. At the same time there has been some attempt to correlate the incidence of tonsillitis and rheumatic fever and an effort to show that removal of tonsils is of distinct benefit in the prophylaxis of recurrent attacks of rheumatic fever with the resulting carditis. Kaiser has attempted to prove a close relationship between tonsillitis and attacks of rheumatic fever. His statistics, when read uncritically, appear to prove a connection between these conditions. However he fails to give a comparable time element in the untreated cases and those tonsillectomized. His statistics have been widely quoted and accepted at their face value. Here and there doubters have appeared. For there is no physician of wide experience who has not seen recurrent attacks of rheumatic fever after complete removal of the tonsils or who has not seen recurrent attacks of carditis under similar conditions. One doubter in England where the incidence of rheumatic fever is greater than it is in any other country, writes that there is no justification for Kaiser's statement that "It is fair to conclude that the tonsils undoubtedly are a focus in many cases of rheumatic fever. Their removal offers considerable protection against recurrent attacks, and when the tonsils are removed before symptoms have developed, the chances for escaping rheumatic infection are appreciably increased."

Here and there in the English literature are statements denying absolutely the efficacy of tonsillectomy as a measure reducing attacks either of rheumatic fever or chorea, or carditis.

This seems to the writer to be an exceedingly important matter to settle. There have been so many thousands of tonsils removed from children because of the belief that it protected them from rheumatic fever that an expression of contrary opinion lays one open to the charge of not wishing to protect the children. When you run with the herd the way is smooth. When you buck the herd you are apt to be trampled upon. So it is with tonsillectomy and rheumatic fever. The majority believe religiously in a close relationship, and to attack this belief puts one out of the pale.

Now, impressions are notoriously misleading, and the blind following of authority often gets one into difficulties. Tolerance of the other fellow's opinion is a virtue which seems to be losing ground in this intolerant age. Let us examine a few facts about rheumatic fever disclosed by recent work.

In the first place it is admitted that the cause of the disease is unknown. Swift and others now view it as allergy. There is much to sustain this contention. Zinser has found both hemolytic and non-hemolytic streptococci in the throat, in the spleen, and in the heart muscle of cases of rheumatic fever and carditis. No one organism apparently is the active causative agent. Given the constitutional predisposition (admittedly a vague term but an undoubted state) several different varieties of organisms seemingly can produce the allergic state which develops rheumatic fever.

In the second place rheumatic fever is now regarded as a disease of the heart. The joint manifestations are of secondary importance. No real joint involvement ever results even after repeated attacks. The lesion is always periarticular. If there is effusion into a joint it is absorbed without leaving any sequelae.

In the third place there is evidence that rheumatic disease is mildly infectious. It occurs in more than one member of a family. It is not altogether a disease of damp surroundings, of cold localities.

Finally it is a disease of young children. The average age at onset is about seven years. While first infections may be found as late as the early twenties, at about the age of twelve the tendency to infection begins to diminish. A finding of considerable importance is that the earlier the age of

onset of infection the greater is the number of recurrences. The later the age at onset the greater is the number of recurrences within one year.

These recurrences are what have caused all the controversy concerning: "to tonsillectomize or not to tonsillectomize." A very careful study by Wilson[1] and her associates has just come to hand. She investigated 413 rheumatic children whose periods of observation ranged from one to ten years. In 247 cases the tonsils were removed. The others, 166 served as controls. Complete data in 245 cases showed that manifestations of rheumatic infection (polyarthritis, growing and joint pains, chorea, nodules, and carditis) recurred in 117 (47.7 per cent); infection appeared for the first time in 85 (34.7 per cent), a total incidence in tonsillectomized children of 202 out of 245 (82.4 per cent). These are interesting figures. In an analysis of the relationship between the age at operation and recurrent infection the figures showed that when operation was performed between six and nine, the period of greatest incidence, there were half again as many recurrences as when operation was done after the age of ten. Age as much as, if not more than, operation apparently determines the incidence of recurrences. Another point brought out is that in both treated and untreated children the incidence of infections increases from two to eight years and thereafter gradually but progressively declines. Plotted curves for this relationship show exactly the same trend. A most significant result of plotting such curves was that the untreated children at each age experienced fewer infections than did those that were treated. Attention is called to the conclusions drawn from statistics of operations performed at different ages. For example if the majority of cases reported were operated upon at ten years or later, the results might appear to be favorable to operation if judged by recurrent infection. On the other hand in a series where operations were performed between six and nine years there would be a high incidence of recurrences. Authors who have reported the beneficial effects of tonsillectomy upon recurrences have not taken this age factor into consideration.

Curves were constructed for recurrences at different age periods. They showed that the longer the period of observation, the greater is the average number of infections at each susceptible age, whether treated or untreated.

The authors call attention to the fact that in children the lymphatic ring of the pharynx comprises much other lymphatic tissue besides the tonsils. When tonsils are completely enucleated therefore much spongy lymphatic tissue remains and as long as we are quite ignorant of the portal of entrance or mode of infection in rheumatic fever, we are rather blindly groping around and in our dilemma we run the risk of making the tonsil a "nuciform sac,"[2] the removal of which is a panacea for all ills.[2]

The authors conclude from their study very definitely that the routine removal of tonsils for the prevention of rheumatic heart disease in children is not based on conclusive data.

On the other hand, while the series which the authors report is not a large one, it is large enough to show that just as many recurrences of manifestations of rheumatic infection occur in those children whose tonsils are left alone, as in those whose tonsils are removed. This can only mean that in those children with already existing mitral stenosis, aortic insufficiency or pericarditis, the removal of the tonsils would have neither beneficial effect upon the heart lesions, nor prevent the further development of the lesions.

An interesting point, just to be touched upon here, which the authors also bring out is that just one-half of the tonsillectomized children developed recurrent tonsillitis. Of the untreated group practically the same proportion developed recurrent tonsillitis.

The writer has felt for some time that too many unnecessary tonsillectomies are being performed. He is pleased to report that he by no means stands alone in this viewpoint. Among those who share this opinion are competent laryngologists. The peak of the craze for universal tonsillectomy seems to have been passed. For this we should duly give thanks. Let us hope now that the pendulum will not swing all the way to the other extreme. Tonsillectomy should undoubtedly be done upon many children and adults. No one can deny this. But as a preventive of the recurrences of manifestations of rheumatic infection it seems to be of questionable therapeutic value. L. M. W.

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1) Wilson, May G., Lingg, Claire, and Croxford, Geneva, Tonsillectomy in Its Relation to the Prevention of Rheumatic Disease. American Heart Jour., 4:197, (Dec.) '28.

2) Shaw's "The Doctor's Dilemma."

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SOCIETY PROCEEDINGS

BROWN-KEWAUNEE

The Brown-Kewaunee County Medical Society held their monthly meeting on January 24th at the Bellin Memorial Hospital, Green Bay. Dinner was served at six o'clock, after which the following papers were read and discussed: Dr. Ralph L. Troup on "Diseases of the Knee," illustrated with lantern slides; Dr. I. E. Levitas on "Fractures of the Knee," and Dr. R. M. Carter on "Injuries to the Knee."

A motion was made to turn the arrangements for the meeting of the sixth and eighth districts over to the program committee and also to send a copy of the resolutions adopted by this society relative to state medicine to all the secretaries of the county medical societies. The resolutions adopted follow:

"The Brown-Kewaunee Medical Society recommends that the industrial panels be sufficiently enlarged to give the workers wider selection in the choice of a physician to treat them for compensable injuries. The society feels that the employer and insurance company should be allowed some choice in the selection of a panel, but feel that the present system is too narrow and too discriminatory.

"It is further recommended that this society stands opposed to the spread of state medicine under the guise of free chest clinics, free school clinics, free school examinations and the like. This society is well aware of the need of some public health measures, and recommends that a plan be adopted by which local medical societies would carry on this work.

"We are opposed to the abuse of the provisions relating to the admittance of patients to the Wisconsin General Hospital, and feel that a great deal of this work could be done cheaper and as well in the local communities. Especially do we condemn the referring of patients able to pay for medical service.

"We feel that this condemnation is directed more against the manner in which these activities are carried out rather than against the type of work itself, and further recommend that these various groups engaged in this free work consult with the local medical authorities before engaging in the work of a community."

M. H. F.

DOUGLAS

A joint meeting of the Douglas County Medical Society and the Northern Wisconsin Dental Societies was held at the Androy Hotel Wednesday, February 6th. The topics of discussion were focal infection cases as relating to dentistry and medicine. Case histories were given by Drs. W. J. Thomas, T. F. Smith and R. C. Smith. *J. W. McG.*

EAU CLAIRE

The members of the Eau Claire and Associated Counties Medical Society met at the Hotel Eau Claire for a six-thirty dinner meeting on January 28th. Dr. William Ray Shannon, St. Paul, presented an address on "Infant Feeding," discussed by Drs. F. G. Anderson and E. P. Hayes. "Interesting Points to the General Practitioner in Eye, Ear, Nose and Throat Conditions" was the subject of a paper by Dr. F. S. Cook, of Eau Claire. This was discussed by Drs. A. L. Payne and J. Y. Malone. There was an unusually large attendance for a midwinter meeting. *E. E. T.*

FOND DU LAC

The growing need of an isolation hospital in the city of Fond du Lac was discussed at a meeting of the Fond du Lac County Medical Society at the Hotel Retlaw Tuesday evening, January 22nd. It was purely a local meeting, members from the surrounding villages and towns being unable to attend because of snowblocked roads.

"At present contagious cases are confined in the hospital with all others," said Dr. R. L. Prees, of North Fond du Lac, president of the society. "This is not fair to those who do not have a contagious disease. The proposed institution would also take care of those who suddenly become insane: Now they are kept at the county jail, which is hardly a fit place for cases of that sort. At an isolation hospital the insane could be kept under observation for any period of time and would have the best medical service."

The remainder of the meeting was devoted to discussion of questions affecting the local physicians.

Dr. E. L. Sevringhaus, of the University of Wisconsin, gave a talk on "Basal Metabolism" at a meeting of the Society at the Hotel Retlaw, Wednesday night, February 13th. The lecture followed dinner. Thirty-five persons including members of the society from Fond du Lac, Waupun, Campbellsport and Rosendale, attended the meeting. A general discussion of "Basal Metabolism" followed the lecture. Dr. P. A. Hoffmann of Campbellsport, presided. *H. R. S.*

LANGLADE

The Langlade County Medical Society held its monthly meeting at the Hotel Butterfield, Antigo, Wednesday, February 6th, at 12:30. A fine lunch was served and several matters of interest were taken up by the society. A resolution was passed extending thanks to the county board in providing adequate means for keeping the roads open, making it possible for the physicians to reach their patients.

Dr. R. E. Campbell of the Wisconsin General Hospital gave a very interesting paper on "Puerperal Septic Infection," its causes, prevention and treatment.

Dr. E. A. McKenna's application for membership in the society was favorably acted upon. The doctors present included: Drs. P. J. Dailey, Elcho; M. J. Donohue, E. J. Donohue, G. H. Moore, Joseph Lambert, L. A. Steffen, C. E. Zellmer, R. J. Portman, E. A. McKenna, and J. C. Wright, all of Antigo. *J. C. W.*

MANITOWOC

At a meeting of the Manitowoc County Medical Society held at the Holy Family Hospital in Manitowoc on

January 14th, the following officers were elected: President, Dr. J. E. Meany; vice president, Dr. F. W. Hammond; secretary-treasurer, Dr. A. P. Zlatnik; delegate, Dr. L. J. Moriarty; alternate, Dr. F. E. Turgasen, and censor, Dr. H. W. Aldridge. *A. P. Z.*

MARATHON

The annual meeting of the Marathon County Medical Society was held at St. Mary's Hospital on the evening of January 23rd. Voting on tickets proposed by two nominating committees, the following officers were elected for the year 1929: President, Dr. W. A. Green; vice president, Dr. A. W. Boslough; secretary-treasurer, Dr. V. E. Eastman; delegate, Dr. H. H. Christensen; alternate, Dr. S. M. B. Smith; censor, Dr. W. E. Zilisch, and member of dispensary committee, Dr. R. F. Braun. On recommendation of the board of censors, Dr. James K. Trumbo was elected to membership.

Following the business session, the following program was presented: "X-Ray Diagnosis in Diseases of the Stomach," by Dr. R. C. Cantwell, Shawano, and "Present Conceptions in the Treatment of Puerperal Sepsis," by Dr. John W. Harris, University of Wisconsin, Madison. *V. E. E.*

MARINETTE-FLORENCE

The members of the Marinette-Florence County Medical Society met with the Menominee County Society Thursday evening, January 24th, at the Studio Club, Menominee, Michigan. A six o'clock dinner preceded the business meeting.

The societies met again at the Studio Club, Menominee, Mich., Thursday evening, February 20th. Dr. F. W. Moll of Escanaba presented a case with an artifical larynx. Dr. G. R. Duer of Marinette, read some interesting case reports. A six o'clock dinner preceded the program. *M. D. B.*

MILWAUKEE

Dr. Elmer Sevringhaus, University of Wisconsin, Madison, spoke on "Obesity" at the meeting of the Medical Society of Milwaukee County on February 8th. A paper on "Primary Fungus Infection of the Lungs" was presented by Dr. W. D. Stovall, of the State Laboratory of Hygiene, Madison. Dr. Robert Blumenthal, Milwaukee, read a case report on "Massive Collapse of the Lung. E. L. T.

OCONTO

At the annual meeting of the Oconto County Medical Society, held on January 21st, the following officers were elected: President, Dr. R. J. Goggins; vice president, Dr. C. J. Ouellette, and secretary, Dr. G. W. Krahn. Drs. C. J. Ouellette and E. A. Linger, both of Oconto, were elected as delegate and alternate, respectively.

G. W. K.

ROCK

Fifty physicians attended the monthly meeting of the Rock County Medical Society Tuesday evening, January 29th, at which time an interesting program on roentgenology was presented. Dinner was served at the Grand Hotel, after which Dr. Charles Sutherland, Mayo Clinic, and Dr. Walter G. Sexton, Marshfield Clinic, gave illustrated lectures. Dr. Sutherland spoke on "X-Ray Diagnosis of Lung Lesions" and Dr. Sexton had for his subject "Calculi of the Urinary Tract."

Dr. W. J. Allen, Beloit, was named as delegate to the state meeting in place of Dr. T. W. Nuzum, whose term has expired. Dr. H. O. Delaney, Beloit, was named as alternate. The milk committee, of which Dr. Wayne A. Munn is chairman, was reappointed for another year.

H. E. K.

WALWORTH

At the regular monthly meeting of the Walworth County Medical Society held at Elkhorn, Tuesday, February 12th, Dr. Louis M. Warfield of Milwaukee presented an interesting paper on "The Heart."

A resolution was adopted advocating county wide immunization of all school children against smallpox and diphtheria. This procedure has been adopted in Delavan and Williams Bay schools with gratifying results.

The next meeting of the society will be held at the new County Hospital at Elkhorn. This meeting will be in the form of a dedication program, commemorating the opening of the new section of the hospital. *S. G. M.*

MILWAUKEE ACADEMY

Dr. H. M. Richter, Northwestern University Medical School, Chicago, addressed the Milwaukee Academy of Medicine on January 22nd. His subject was "Clinical and Surgical Aspects of Thyroid Disease." Dr. Norbert Enzer, Milwaukee, spoke on "The Pathology of Goiter" and Dr. M. G. Peterman, Milwaukee, presented a case report on "Suprarenal Insufficiency." *D. E. W. W.*

MILWAUKEE ORTHOPEDIC CLUB

The Milwaukee Orthopedic Club was formed on December 17th at Milwaukee. Membership of the club includes: Drs. F. J. Gaenslen, H. C. Schumm, L. D. Smith, J. W. Powers, C. C. Schneider, and J. O. Dieterle. Dr. F. J. Gaenslen was chosen president and Dr. J. O. Dieterle secretary-treasurer. *J. O. D.*

MILWAUKEE OTO-OPHTHALMIC

The Milwaukee Oto-Ophthalmic Society held its February meeting at the Wisconsin Club, on February 19th, at 6:30 P. M. We were very fortunate in being able to have Dr. Peter Kronfeld, Vienna, present, who spoke on "Recent Developments in the Diagnosis of Glaucoma." Dr. Kronfeld, is a member of the Meller Clinic, Vienna.

The following applicants have read their thesis, have been passed on by the council, and were elected to membership at this meeting: Dr. H. J. Schmidt and Dr. O. P. Schoofs. *E. R. R.*

UNIVERSITY OF WISCONSIN

The University of Wisconsin Medical Society met at the Service Memorial Institute on February 12th, at which time the following symposium was presented: "The Teaching Value of Roentgenograms" by Dr. F. J. Hodges; "The Radium Emanation Plant" by Dr. W. D. Thayer; "Physical Therapy of Bell's Palsy" by Dr. J. C. Elsom and "Roentgen Rays of Long Wave Length in Therapy" by Dr. E. A. Pohle.

This symposium was particularly appropriate at the present time in view of the recent expansion of the department of radiology of the Medical School, the acquisition of new x-ray apparatus for treatment, and a complete radium emanation plant.

The society met again on February 27th, at the Service Memorial Institute.

"Sunshine from the Sea," a motion picture demonstration on the subject of cod-liver oil, was shown at 4:30 and at 8:00 o'clock "How Science Aids in Controlling Infectious Diseases," a motion picture portraying the manufacture and standardization of biological products, was presented.

NEWS ITEMS AND PERSONALS

Dr. M. G. Peterman, of Milwaukee, addressed the meeting of the Midwest Dietitians Association in Chicago at the Sarah Morris hospital on Saturday, January 19th. The subject was the "Treatment of Epilepsy in Childhood."

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The Kiwanis club of Darlington elected as its president for the ensuing year Dr. W. W. Peck at a weekly luncheon meeting during January.

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The general health, economic and intellectual standards of a community are measured by its infant mortality rate, Dr. John P. Koehler, city health commissioner, told the Milwaukee County Federation of Women's Clubs at the January meeting, Pfister Hotel. "How to Save 427 Infants Annually" was his topic. Dr. Koehler gave statistics showing that annually in Milwaukee between 300 and 400 babies die at birth and that more than 400 die within 30 days after birth. At least half of this total can be saved through proper pre-natal care.

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Dr. Eugene A. McKenna, Madison, has become associated with Dr. R. J. Portman, of Antigo, in the practice of medicine, sharing offices with him in the Cody building. Dr. McKenna is a graduate of the Northwestern University Medical School and served his interneship in Milwaukee hospitals.

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Dr. D. J. O'Connor was elected president of the staff of St. Elizabeth hospital, Appleton, at the annual meeting held in January. He succeeds Dr. J. S. Reeve as head of the organization. Other officers elected were: Dr. E. H. Brooks, vice president, and Dr. J. L. Benton, secretary-treasurer.

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The Sacred Heart Sanitarium, Milwaukee, has been compelled by a constant waiting list to add a new fireproof addition of 100 rooms, which now gives a total capacity of 500 beds. The dining room in the new department, with seating capacity of 125, is equipped with every modern convenience, comfort and service to the patients. The ladies' bath department has been enlarged and furnished with the most scientific apparatus for accurate control of hydrotherapeutics.

The medical staff of twelve full time physicians is under Dr. S. S. Stack, who is now serving his thirtieth consecutive year as superintendent of the Sacred Heart Sanitarium.

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Dr. K. W. Doege, president of the Marshfield Clinic and of the State Society, went on tour with the Wisconsin Surgical Club to Cleveland and Cincinnati, Ohio. In Cleveland the group visited the Crile and Hamann clinics and in Cincinnati the Heuer clinic. Dr. Joseph F. Smith, Wausau, is secretary of the club.

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Dr. W. G. Kemper, Manitowoc, was named city health officer of that city at a recent meeting of the council. He will serve the unexpired term of Dr. Max Staehle, deceased.

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Appointed to the State Board of Health by Robert M. LaFollette Sr., in February, 1902, and elected as secretary of the board January 27th, 1904, Dr. Cornelius A. Harper, state health officer, celebrated in the month of January his twenty-seventh year of service in the department and his twenty-fifth anniversary as the executive head of the board.

When Dr. Harper entered the department the force consisted of himself and one stenographer. It has now grown to embody eighteen separate bureaus and departments, covering a wide field of education, inspection, experiment work, statistics, and prevention.

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A large number of physicians in the state will be sorry to learn of the death, on January 16th, of Miss Emelia C. Peterson, who for fifteen years was secretary and office assistant to Dr. J. M. Dodd, of Ashland. For the nine years Dr. Dodd was secretary of the State Board of Medical Examiners, Miss Peterson handled the affairs of the office in a most efficient manner, making many improvements in the records; installing a filing system and in general elevating the work of the board to a high standard.

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Dr. E. S. Knox was elected president of the staff of St. Mary's hospital, Green Bay, at the annual meeting held in January. Dr. J. J. Robb was chosen vice president, and Dr. F. L. Crikelair, secretary-treasurer. Three physicians were added to the staff. They include: Drs. C. S. Williamson, R. L. Troup and E. M. Jordan.

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Dr. Li Ting An, Chinese physician, visited Dr. John P. Koehler, Milwaukee health commissioner, during the latter part of January. He is visiting large cities in search of new health protection ideas. Dr. Ting An is a graduate of Harvard university.

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Dr. William F. Lorenz, Madison, has been appointed colonel of the 135th medical regiment of the Wisconsin national guard to succeed Col. Edgar F. Barnes, Ripon, retired. Lieut.-Col. James Dean, Madison, has been named executive officer in place of Col. Lorenz, and Capt. W. J. Bleckwenn, also of Madison, will take Col. Dean's post on the state staff and corps.

Col. Barnes and Brigadier-General O'Connell, resigned, were guests of honor at a dinner given by 135th regiment officers at the Hotel Loraine.

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Dr. and Mrs. J. B. Gordon, Shawano, have departed for the south, where they will spend the winter. The doctor's practice will be discontinued until spring in order that he may have an opportunity to rest and restore his health.

The Kiel Chamber of Commerce elected Dr. F. P. Knauf as president of the organization for the ensuing year. Dr. Knauf has practiced medicine in and about that community for the past twenty-six years and has always taken a keen interest in civic affairs.

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Means of remedying defects in the disabled child were expounded to members of the Wisconsin Physiotherapy Association by University of Wisconsin staff members at the Wisconsin General hospital. The meeting followed a two-day convention of the Wisconsin Association for the Disabled held in Madison the last week in January. Dr. J. C. Elsom, Madison, addressed the association on "The Value of Therapeutic Exercise." By exhibiting distinctive cases from the Bradley Memorial and Wisconsin General hospitals, Dr. H. C. Schumm, Milwaukee, demonstrated surgical and physio-therapeutical work performed. He stressed follow-up treatment after operations.

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Based upon figures received from cities of more than 10,000 population, influenza and pneumonia took more than 1,000 lives in Wisconsin during the recent epidemic, Dr. C. A. Harper, secretary of the State Board of Health, reported in January. Reports from the conference held recently in Washington indicate that 85,000 died in the United States.

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Dr. Willard M. Sonnenburg, formerly of Sheboygan Falls, has announced the removal of his offices to 925 North Eighth St., Sheboygan. These offices are located above the Bock Drug Store and were occupied by the late Dr. O. B. Bock.

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A campaign for the inoculation of all children in the city of Madison under twelve years of age with toxin-antitoxin will be conducted by the city board of health during the remainder of the winter, was announced by Dr. F. F. Bowman, city health officer, in February.

The treatment will be given to all children between the ages of six months and twelve years with the consent of the parents. A questionnaire explaining the campaign and asking the parents to grant permission to the health authorities to inoculate their children will be distributed through the school children. A nominal fee of 25 cents will be charged to pay for a portion of the cost, principally the cost of the toxin used.

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Two Appleton physicians have been named by the aeronautics branch of the department of commerce as medical examiners for that district. Dr. E. H. Brooks will have charge of eye, ear, nose and throat examinations and Dr. E. F. Mielke of the general physical examination. They will examine applicants for commerce department licenses as air pilots for various types of flying, and will examine licensed pilots every six months as is required by the commerce department to permit aviators to retain licenses.

Dr. A. R. Wittman, of Merrill, observed his seventieth birthday on Wednesday, February 6th. He was born in Manitowoc county and after graduating from Rush Medical College, Chicago, practiced at St. Wendel. He later moved to Kiel, where he followed his profession until 1891, at which time he went to Merrill. Dr. Wittman holds a prominent place in the state as an authority on Indian relics.

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Dr. Henry S. Atkinson, Green Bay, was elected city health commissioner to succeed Dr. Otis W. Saunders, resigned, for the unexpired term from February 1st to May 1st.

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A special train carrying approximately 200 physicians left Chicago recently for Rapid City, S. D., where the men made their headquarters at the Alex Johnson hotel, named after A. C. Johnson, vice president of the North Western Railroad. Among Wisconsin physicians who attended the five-day convention of the North Western road physicians were: Drs. W. H. Palmer, Janesville; A. C. Helm, Beloit; T. J. Redelings, Marinette; Olin Paul, Kaukauna; R. L. Prees, Fond du Lac; H. F. Derge, Eau Claire, and W. L. M. Knowles, of Spooner.

The trip included a visit to the Black Hills and the lodge which was occupied by President and Mrs. Coolidge during their vacation in the summer of 1927.

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At the annual meeting of the State Board of Health undulant fever and tularemia were both added to the list of reportable diseases. The board voted its approval of the Newton bill now pending in congress, extending the time of the Sheppard-Towner federal aid and extending its features.

Dr. G. Windesheim, Kenosha, was re-elected president of the board, as was Dr. Joseph Dean, Madison, vice president, and Dr. C. A. Harper, Madison, secretary.

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Dr. James K. Trumbo has become associated with Dr. L. M. Willard and Dr. W. A. Green of Wausau in the practice of eye, ear, nose and throat.

Dr. Green returned December 31st from a several months' Eurpoean trip, during which time he studied at several of the clinics on the continent. Dr. Willard left February 10th for a three months' cruise on the Mediterranean.

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Dr. J. E. Donnell, formerly of Cuba City, sailed on the French liner De Grasse on February 14th for Europe, where he will spend the greater part of a year doing post graduate work on eye, ear, nose and throat. Dr. Donnell disposed of his practice at Cuba City in July, 1927, and has since that time been doing post graduate work in the above subjects at Graduate School of Medicine of University of Pennsylvania and New York Post Graduate Medical School and Hospital.

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Dr. G. A. Thielke, Wausau, is spending several months in Milwaukee doing post graduate work in eye, ear, nose and throat. During his absence his practice is being carried on by Dr. R. F. Braun.

Dr. Carl Henry Davis, Milwaukee, spoke recently at a joint meeting of the Orleans Parish Medical Society and the New Orleans Gynecological and Obstetrical Society on "The Obstetrical Patient." Dr. Davis addressed one of the largest audiences ever gathered in the Hutchinson Memorial. His lecture was illustrated with motion pictures.

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State officials are coping with serious outbreaks of rabies in widely separated districts in Wisconsin, and in a press bulletin in preparation will urge full public and private cooperation in stamping it out and offer approved advice for its prevention and control.

The state board of health is working in active cooperation with the state livestock sanitary board, which has full authority to enforce rigid quarantine of all dogs and other animals in preventing the spread of this highly fatal disease.

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Dr. A. J. Pullen, Fond du Lac, spoke before the students of St. Agnes' Hospital Training School for Nurses during February, giving his impressions of the European countries from the viewpoint of a physician and surgeon.

The speaker dwelt on the methods of handling contagious and infectious diseases in England, Ireland and Scotland and spoke of hospital service in the Scandinavian countries. He also described hospitals in Vienna, which, he said, are the largest in the world and consequently the center of surgical interest.

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Dr. C. P. Farnsworth, builder of the Madison Sanitarium and Hospital took over the duties of the institution February 1st. He erected the building in 1903 and in 1907 left Madison. Since that time Drs. John Hopkins of Glendale, Calif., Hoehness of Salt Lake City, W. T. Lindsay, Madison, and Robert Ingersoll of Oxford, Wis., have been in charge of the hospital at various times until 1927 when P. L. Larson took it over.

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Dr. H. T. Schlegel, Wausau, addressed the joint meeting of the Lake County and Kenosha County Medical Societies recently. The session was held at the Veterans' Hospital, Fort Sheridan. He also read a paper before the Round Table Medical Society at the Drake Hotel, Chicago, the day following.

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Dr. W. K. Stratman-Thomas, young Madison physician, is continuing his research work on a sleeping sickness cure in the Belgian Congo. He was recently elected a member of the Society of Doctors of Tropical Medicine, London.

Dr. Stratman-Thomas has worked in Africa since last August and is now in Leopoldville, a city of 15,000, where the thermometer rises to 130 degrees F. He remains in a section until medical men become familiar with methods of treatment and are able to carry on the work.

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An increase in the state's death rate during 1928, due largely to influenza and pneumonia epidemics, is reported by the state department of public health. The rate for the year was higher than it has been in five years, being eleven persons per thousand population, as contrasted to 10.4 for 1927.

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A joint meeting of the Wisconsin Hospital Association and the Hospital Association of the State of Illinois was held February 20th and 21st at the Hotel Sherman, Chicago. Dr. J. W. Coon, Stevens Point, president of the Wisconsin Association, presided at the opening session. Among Wisconsin members on the program were Dr. Robert C. Buerki, superintendent, State of Wisconsin General Hospital, and Dr. W. A. Henke, of Grandview Hospital, La Crosse.

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Dr. David D. Mehigan, chairman of the first aid and health committee of the Milwaukee chapter of the American Red Cross, spoke before the Association of Commerce first aid school meeting recently at the Public Museum, Milwaukee.

DEATHS

Dr. Wendell A. Anderson, formerly of La Crosse, died at the home of his son in Seattle, Wash., Wednesday morning, January 23rd. Dr. Anderson was born in the town of Gray, Maine, September 9, 1840. Having chosen the profession of medicine, in the summer of 1859 he began study under the preceptorship of his father, a prominent physician of Gray, Maine. He graduated from the Columbia College of Physicians and Surgeons of New York in March, 1863, and in April of the same year was appointed assistant surgeon of the Third Maryland Volunteer infantry. He served with this regiment in the field of Chancellorville, Gettysburg, and in all its subsequent engagements with the Army of the Potomac from the wilderness to Lee's surrender.

After the war was ended he came to La Crosse and entered into active practice until his retirement. He served as mayor of La Crosse from 1899 to 1901 and from 1907 to 1909. In the last years of his life, Dr. Anderson devoted his time largely to literary pursuits and visiting with his relatives and old friends. He is survived by three sons.

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Dr. C. Gurnee Fellows, Chicago, died at his home Saturday, February 2nd. He was born in Milwaukee April 27, 1863, and took his bachelor of arts and master of arts degrees at Lawrence College, Appleton, and his doctor of medicine degree at Hahnemann Medical College, Chicago. He spent several years in post graduate work in New York, Vienna, Paris and London. Dr. Fellows practiced medicine in New Orleans from 1885 to 1888 and then moved to Chicago.

The deceased was a member of the American Institute of Homeopathy, the American Academy of Ophthalmology, the American College of Surgeons and the American Medical Association.

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Dr. Franklin E. Walbridge, formerly of Milwaukee, died on February 12th, of a heart affliction in Altadena, Calif. For more than a quarter century Dr. Walbridge was associated with Dr. Ernest E. Copeland under the name, Copeland and Walbridge. He was surgeon and chief of staff of Knowlton hospital, now Columbia hos-

pital, until 1911, when he retired. In Stevens Point, where he went to live, he became a member of the staff of River Pines sanatorium.

Dr. Walbridge was born in Avoca in the year 1851 and was a graduate of the University of Michigan Medical College in 1877. He began his medical practice in Fremont and after a few years moved to Milwaukee. He spent his winters in California. His wife survives him.

SOCIETY RECORDS

NEW MEMBERS

Haines, M. C., Oshkosh.
Ball, E. J., Nekoosa.
Stout, R. B., Madison.
Friedman, Gerald, 3503 Center St., Milwaukee.
McCarthy, J. J., Sun Prairie.
Krohn, Robert, La Crosse.
Ulvin, Henry, 85 E. Wells St., Milwaukee.
Muenzner, R. J., 128 E. Wisconsin Ave., Milwuakee.
Guerin, L. H., 944 2nd St., Milwaukee.
Gobar, F. W., 682 3rd St., Milwaukee.
Glisch, W. P., 488 Mitchell St., Milwaukee.
Benton, R. W., A. O. Smith Corp., Milwaukee.
Bach, Mark J., 120 E. Wisconsin Ave., Milwaukee.
Crigler, R. R., 524 Hawthorne Ave., South Milwaukee.
Cox, A. Milton, 397 Lincoln Ave., Milwaukee.
Farnsworth, C. P., Madison.
Trumbo, James K., Wausau.
Troup, Ralph L., 306 Cherry St., Green Bay.
Jordan, E. M., 306 Cherry St., Green Bay.
Williamson, Carl, S., 306 Cherry St., Green Bay.
Cremer, H. V., Galesville.
Barr, A. H., Oconto.
McKenna, E. A., Antigo.
Pohle, E. A., Madison.

CHANGES IN ADDRESS

Clark, I. F., Wauzeka, to Bruce.
Galford, G. H., Neenah, to 204 Wisconsin Ave., Milwaukee.
Rundell, A. S., Beloit, to Mayville, Mich.

CORRESPONDENCE

"DELIGHTED"

Office of the Health Department
City of Milwaukee
January 23rd, 1929.

From E. V. Brumbaugh, M. D.
Deputy Commissioner of Health.
To Mr. George Crownhart, Secretary,
State Medical Association of Madison.
Subject: Publication.

My dear Mr. Crownhart:

I received the Medical Society Blue Book the other day and was very much delighted with it. I feel that you are to be highly complimented on the completeness of the book. I notice, in looking over its contents, that it carries essential information that was frequently requested from members of the Health Department. We will find it an invaluable aid in our work.

Sincerely yours,
E. V. Brumbaugh, M. D.
Deputy Commissioner of Health.

POST GRADUATE STUDY

Muirdale Sanatorium
Wauwatosa, Wisconsin.
January 10, 1929.

From: Dr. G. L. Bellis, Supt.
Muirdale Sanatorium,
Wauwatosa, Wis.
Subject:—Resident Post Graduate Study in Tuberculosis.

1. The organization of the Medical Staff of Muirdale Sanatorium in addition to permanent resident and visiting physicians, provides one resident medical position of a temporary nature.

2. In view of the fact that Muirdale Sanatorium offers through its wealth of clinical material and advanced diagnostic and therapeutic facilities, an excellent opportunity for post graduate study; and further that the position in question is open to regularly graduated Doctors of Medicine, it appears to us advisable to make this fact known to the medical profession of our state through the medium of the Wisconsin State Medical Journal.

3. Should any regularly licensed physician in the state desire to avail himself of the privilege of studying tuberculosis as a resident physician at Muirdale for a period of ninety days an application addressed to the undersigned will be given consideration and if acceptable the dates for such service can be mutually agreed upon.

G. L. Bellis,
Superintendent and Medical Director.

BLUE BOOK HELPFUL

Brandon, Wis.,
January 24, 1929.

Mr. J. G. Crownhart,
Secretary,
State Medical Society of Wis.,
Madison, Wis.
Dear Mr. Crowhart:

I received the Medical Blue Book of Wisconsin for 1929, and thank you very much.

I just completed making my income tax for 1928 and found the Blue Book of much help to me, especially in the making of deductions.

Very truly yours,
F. E. Shaykett, M. D.

FEES FOR POOR RELIEF

Madison, Wis., 1/28/29.

—. —. ————, M. D.
Mineral Point, Wis.
Dear Sir:

Mr. Crownhart has referred to me your inquiry of the 23rd: "whether there is any law in this state entitling a physician to collect ten dollars emergency fee for the first treatment of the poor or those unable to pay."

There is no such law. In order to be entitled to pay for the treatment of poor persons the physician must first be employed by the board or council.

Emergency relief is provided for by section 49.18 of the statutes, passage of which was secured by the State Society in 1927, and which reads as follows: "49.18 Emergency medical relief. Unless the board or council shall have designated some other official therefor, the town

chairman, village president, mayor or chairman of the county board, when in his opinion reason therefore exists, shall provide temporary medical relief for a poor person, and liability for expenses so incurred shall be the same as though incurred by the board or council."

But even under this section, prior authorization is necessary to be entitled to compensation by the municipality.

Yours truly,
F. M. Wylie, *Counsel.*

INSULIN FOR THE POOR

Madison, Wisconsin.
January 25, 1929.

State Board of Health,
Capitol.

Gentlemen:

The material facts presented in your letter of December 5, 1928, are as follows: A person has diabetes which requires daily injections of insulin. Ordinarily, this person is able to maintain himself with the exception that he finds it financially beyond his means to pay from $6 to $12 per month, the sum necessary to secure the daily supply of insulin. You inquire whether the Poor Commissioner of a county has the power to furnish insulin to such person. You state that in your opinion the poor commissioner does have this power.

"Every town, village and city shall relieve and support all poor and indigent persons lawfully settled therein whenever they shall stand in need thereof, except as hereinafter provided. The town board, village trustees, or common council, respectively, in each town, village, or city shall have the oversight and care of all such poor persons and indigents so long as they remain public charges; and shall see that they are properly relieved and taken care of in the manner required by this chapter."

Section 49.15 of the statutes provides that where a county has voted to abolish the distinction between county power and town, village and city power the county shall relieve and support the poor in said county.

The duty imposed upon the county to relieve and support poor and indigent persons, includes not only food and clothing, but also proper medical attention. The furnishing of food, clothing and medical attention in no way depends upon the fact as to whether the person is entirely destitute. The legislature clearly intended that support might be given in those cases where a person is only partially dependent upon the county for support.

In the circumstances stated by you it is the opinion of this department that the poor commissioner clearly has the power to furnish a daily supply of insulin to the person in question.

Yours very truly,
(Signed) Suel O. Arnold,
Assistant Attorney General.

Approved:
John W. Reynolds,
Attorney General.

Caption: Poor Commissioner has the power to furnish daily supply of insulin to a person affected with diabetes even though such person is capable of supporting himself in all other respects.

THE BLUE BOOK

The Massachusetts Medical Society
182 Walnut St., Brookline, Mass.

Mr. J. G. Crownhart, Secretary
Medical Society of Wisconsin,
Madison, Wisconsin.

February 5, 1929.

Dear Mr. Crownhart:

Thank you for the Medical Blue Book of Wisconsin, 1929, which you have so kindly sent us. You are to be congratulated on its fine appearance and on the usefulness of its contents. It will be placed in the Boston Medical Library, our headquarters, for the use of our Fellows.

Faithfully yours,
W. L. Burrage, *Secretary.*

FROM CALIFORNIA

California Medical Association
San Francisco, California.

January 31st, 1929.

Mr. J. G. Crownhart, Secretary
State Medical Society of Wisconsin,
Madison, Wisconsin.

Dear Mr. Crownhart:

The Medical Blue Book of Wisconsin for 1929 arrived this morning and has occupied every spare minute since. Nowhere have I seen so much useful information for physicians crowded into less than one hundred reading pages.

The Wisconsin Medical Society has given each member more in that one volume than the cost of membership. I hope the California Association may some time duplicate this service.

With warm appreciation of your gift, I am

Very cordially yours,
Emma W. Pope, *Secretary.*

"SHOULD PROVE HELPFUL"

American Medical Association
Bureau of Legal Medicine and Legislation
535 North Dearborn Street, Chicago,

February 13, 1929.

Mr. J. G. Crownhart, Executive Secretary,
State Medical Society of Wisconsin,
119 E. Washington Avenue,
Madison, Wisconsin

Dear Mr. Crownhart:

Shortly before I left for Washington, to speak before the Committee on Interstate and Foreign Commerce, against the Newton Bill, a copy of the "Medical Blue Book of Wisconsin, 1929," came to me. Absence from the city and the increased pressure of already excessive work that resulted from that absence have combined to prevent an earlier acknowledgement. I am sorry. I thank you now for the book. It presents in a convenient form a mass of information of interest to the physician that it would be impossible for him to obtain from any other single source. It should prove very helpful to the profession.

Sincerely yours,
W. C. WOODWARD
Director.

Oiling of roads to settle the dust, as is commonly done in the rural districts, has been found to be responsible for an injury to crops growing close to the highway. The "oil dust" raised by traffic and blown to nearby fields, checks the growth of crops by causing a characteristic injury to the leaves, as is shown in studies conducted by James Johnson, horticulturist at the University of Wisconsin.

* * *

Radio interference ills can best be cured by cooperation of local authorities in discovering, eliminating and remedying the sources of radio disturbance, in the opinion of Ford H. MacGregor, chief of the bureau of municipal information, University of Wisconsin extension division, who has just issued a report based on a study of radio ordinances in Wisconsin and the country at large.

"Unless the city is able, through a radio inspector or its electric inspector, to find the sources of interference and to indicate how it can be remedied," the report says, "the city is not likely to get very far in the enforcement of its radio ordinance."

* * *

A drastic program to safeguard the state banking business and put it on a safer basis is backed in the legislature by C. F. Schwenker, state commissioner of banking. Bills he has recommended to the legislature call for a bigger reserve with the present 12 per cent requirement to be backed up with a reserve of 20 per cent of deposits in quick assets; a law giving him power to remove bank directors when they fail to attend meetings; a more thorough check-up of banks; and licensing of all people who want to go into the banking business to assure that the future bankers of Wisconsin will be capable of handling the business.

* * *

Three important changes in the primary election laws of the state have already been proposed in bills offered in the legislature. Senator Blanchard has offered a measure to hold the primary on the third Tuesday in September, instead of the first Tuesday as at present. Assemblyman A. R. Hitt has offered a measure to allow a person to vote for any candidate regardless of party. Assemblyman Wallace Ingalls is the author of a measure which would permit of a county convention to name delegates to a pre-primary state convention that would frame the platform of the party for use in the primary contest.

* * *

Wisconsin will have a detailed inventory of every acre of its territory within five years if the legislature approves a measure soon to be introduced to provide $20,000 a year for that purpose. Detailed soil maps have already been made of most of southern Wisconsin but under the new program laid out by A. R. Whitson, professor of the university soils department, an accurate mapping of northern Wisconsin, where the development question is now acute, would be rushed so that every section would know what it has to offer in the line of resources and what development could be expected.

* * *

The University of Wisconsin has just completed experiments to show the value of treating grain with ultra-violet light to increase the vitamin D content. Two dogs of the same litter were experimented upon. One was fed untreated oatmeal. The other was fed light-treated oatmeal. Except that one had the treated grain, the diets of the two animals were identical. The dog eating the treated grain developed normally. The other developed a severe case of rickets and was extremely bow legged.

* * *

Assemblyman Earl D. Hall, Tunnel City, has introduced a bill to deprive the state conservation commission of the power to close and open hunting seasons. Assemblyman Hall believes that this power should be vested alone with the legislature.

* * *

Both wets and drys have a program before the legislature. The wets are asking an April referendum to get the sentiment of the people as to whether they want the state dry law repealed or whether they desire penalties for beer removed from the act. The drys want stiff jail sentences for those convicted of buying liquor with a law to hold the purchaser as guilty as the seller.

* * *

The cigarette tax fight is destined to come up in the present legislative session. Senator Howard Teasdale, Sparta, announced he will re-introduce his cigarette tax bill of two years ago which went down to defeat after a hard fight. The Teasdale measure would exact a *tax* of one cent a package on the more moderately priced "fags" with a still higher levy on the fancier brands.

* * *

Plans for an improved highway system in Wisconsin are gradually taking form in the legislature with a record number of bills dealing with the question of changing the present road system. The legislature now has three resolutions calling for the appointment of a legislative committee to lay out a 5,000 mile through hard road system, from north to south and east to west. It is estimated that about half of these highways are already paved. Governor Walter J. Kohler as well as the state highway commission and the majority of the county boards have endorsed a through road system.

One of the big fights to come on the road program is over the question of boosting gasoline taxes from two to four cents to pay for additional roads. Some are demanding that if more money is to be raised the additional revenue go back to lighten the burden of building local highways. The reorganization of the entire road building function is probable at this session with the proposal to change the highway commission into three full time members at salaries of $7,500 each. It is also proposed to abolish the free fund which in the past has gone to various counties and in its place create a state fund to be used for through road construction.

There are also many plans in the legislature to change the method of collecting automobile license fees with several favoring a return to a flat rate system. The driver's license law is under fire with a possibility that it will be repealed.

* * *

President Glenn Frank of the University of Wisconsin, told the joint finance committee of the legislature that "the outstanding building need of the university is more adequate library facilities." He said that the university already had a fund of $550,000 for this purpose, but that $700,000 was needed to erect a complete building. Two years ago the Cashman bill to erect a library on the grounds of the university as a memorial to the late Senator La Follette was defeated.

"For running the university of Wisconsin, the state is asked to provide $3,994,694 for 1929-30 and $4,120,960 for 1930-31," declares President Frank in presenting the budget needs. "These amounts do not include student fees and other incidentals. These totals represent the amount in the proposed budget that would come from the state to finance the campus service of the university.

* * *

Loss from forest fires in Wisconsin were materially cut down last year, according to figures just released by the conservation commission. In all of the 11 forest protection districts, comprising about 13,000,000 acres in the northern part of the state, only 430 fires were reported. These burned over a total of less than 45,000 acres, most of which was cut-over marsh land.

* * *

The state conservation commission will send 3,000,000 rainbow trout eggs to Montana within two weeks in exchange for the same number of brook trout eggs. The brook trout are considered a highly desirable fish and the conservation commission was prompted to take this action to introduce new blood into Wisconsin's fish life. With all trout hatcheries in full operation and with a large supply of eggs, Wisconsin lakes and streams are assured an excellent planting of fish when the time for distribution arrives this year.

* * *

Improvement of rural schools of the state is asked for in a bill offered by Senator John E. Cashman, Denmark. The measure is similar to one offered by the senator at the last session, which was defeated. The bill provides that in all school districts where there is no high school, the district must give instruction in the first two years of high school work.

* * *

Extension of the plan to vote by mail is probable at this session of the legislature. Under the present law people who are sick or who will be absent from home on election day, may vote by mail ballot. Senator W. H. Markham, Horicon, has offered a bill to allow persons who live more than a mile from a polling booth to use a mail ballot. This is a part of the plan to get a larger farm vote. It is claimed that on primary election day many farmers are too busy to vote, but would do so if allowed to use the mail ballot.

* * *

Presentation of a World War veteran's legislative program is being completed before the state lawmakers with a number of plans to aid the cause of veterans. The program calls for:

Re-enactment of the soldier's cash bonus law.

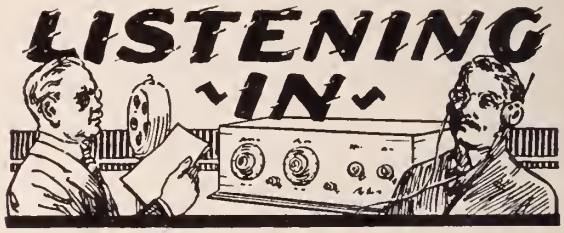
Making Armistice day a legal holiday in Wisconsin.

Repeal of the soldiers' rehabilitation board law to prevent further diversion of the soldiers' funds.

To permit soldiers to get hospital care at the Wisconsin General hospital at clinic rates.

* * *

"Hunters" who go north and buy a deer rather than shoot one themselves will be spared the trouble if a bill drawn up by Assemblyman Fred W. Cords, Milwaukee, passes the legislature. The bill by Assemblyman Cords would provide that a person may secure a commercial hunter's permit from the state which would give him the right to shoot deer during the open season on his own private tract. The commercial hunter would propagate deer on a fenced reserve of 500, 1,000 or 2,000 acres in northern Wisconsin. When the deer season came around he could shoot the deer without limit and sell them at the premises or ship them anywhere he chose, provided that they were properly tagged.



BRINGING IT HOME

What the American Medical Association has had to say of abuses in extension of medical service in the Veteran's Bureau has undoubtedly seemed nothing of local importance to many physicians. That it is a matter that concerns all was illustrated in February during a legislative hearing on a bill providing guardians for certain mentally incompetent veterans. At the hearing the representative of the U. S. Bureau urged as a reason for passing the bill that all the examinations would be done free by the Veteran's Bureau thus saving the counties the fee for employing a local physician. He estimated that this "saving" in Wisconsin would exceed $100,000 in ten years. Just why physicians should bear this extra tax, in effect, was not stated.

NOT LIABLE

In one of the southern states recently a physician attending an o. b. case in a hospital ordered the silver nitrate solution for the infant's eyes as prescribed by their law similar to that in Wisconsin. The nurse used a 30% solution instead of the 1%. The parents sued the physician but the court held that the physician had exercised due care in trying to follow the state law and was not liable.

ADVERTISING REJECTED

During the last two months upwards of $500 of possible income from proffered advertising was rejected by the Wisconsin Medical Journal. While the Journal

struggles to make both ends meet, it will not accept advertising where the claims are extravagant and the merits questionable. Such firms whose advertising is rejected for the Journal turn to direct mail advertising in hopes that they may boost their questionable products in that manner. If members are solicited by direct mail or through personal contacts by companies whose names are not to be found in the advertising section of their own state journal, there is generally a reason why.

MEDICAL HISTORIES

Dr. T. J. Oliver of Green Bay recently wrote a medical history of Brown county which is soon to be published in this Journal. It has now been suggested to all county medical societies that similar papers in each county will not only be of great interest to the members but will go far to preserve the records of the past. In La Crosse county Dr. D. S. MacArthur will write a medical history for which he has data dating back to 1842.

Society Announces Charles S. Sheldon Prize Contest on How Family Physician Can Best Increase His Usefulness

By the unanimous vote of the House of Delegates at its annual session on September 11, 1928, the sum of $100 was voted and will be offered during 1929 for the best essay written by a member of the State Medical Society of Wisconsin or a senior medical student in Wisconsin, on the subject "How Shall The General Practitioner Best Increase His Usefulness." The Council in appointing a committee to award the prize desired to honor one of the oldest of its members, for twenty-five years the Secretary of the Society, a man who in his practice, his interest in the Society and his life best typifies the ideal general practitioner, our best beloved physician, C. S. Sheldon. It has therefore named this prize the "Charles S. Sheldon Prize."

GENERAL RULES GOVERNING PAPERS

The Sheldon Prize Committee desires to call the attention of the membership and students to the following rules governing the submission of papers, for the benefit of those who desire to compete for the 1929 prize:

1. Any member in good standing of the State Medical Society of Wisconsin and any senior medical student in Wisconsin is eligible to compete for the prize. Any question arising as to the eligibility of a candidate or the admissibility of his essay will be settled by the decision of the Council.

2. Manuscripts must be typewritten on one side of the paper; they must be double spaced; and they must not be folded or rolled. Illustrations must be marked on the reverse side with the title of the paper to which they belong.

3. Essays must not contain more than four thousand words. In judging a paper the committee will take into account the basic importance of the work and originality of the ideas therein.

4. Papers should be sent, preferably by registered mail, to Mr. George Crownhart, secretary of the State Medical Society of Wisconsin, 301 Washington Bldg., Madison, Wisconsin. They should be identified by a nom de plume or motto only. A separate envelope should be sent to Mr. Crownhart containing the author's name and his nom de plume or motto, so that after the award is made the name of the writer can be found. Any return addresses or distinguishing marks will be removed from the wrappers before the papers are turned over to the judges.

5. All papers must be in the hands of Mr. Crownhart before Nov. 15, 1929, in order that the judges may finish their work in time for the meeting of the Council in January.

6. The judges reserve the right to withhold the award, in the event that no paper comes up to the standard of excellence they feel should obtain.

Oscar Lotz,
Joseph Smith,
Hoyt E. Dearholt,
George Crownhart, Sec'y,
Hugh P. Greeley, Chm.

Many Bills Introduced Affecting Physicians in New Legislative Session; Basic Science Law Not Attacked

With upwards of thirty measures affecting the practice of medicine already introduced in the 1929 legislative session, none examined up to March first affected the basic science act which was placed on the statutes in July, 1925. The time limit for introduction of bills by individual members has now expired and while new measures may still be brought in through committees, it does not now appear that the cults will attempt to attack the basic science act.

Measures affecting the practice of treating the sick include the following:

A bill to prohibit licensed itinerant practice of medicine, suggested by the State Society and introduced by Senator Morris, Milwaukee, as No. 136 S.

A proposal to greatly extend the field of practice for chiropodists, introduced by request of the chiropodists as No. 181 S. In its present form this measure will be opposed by the State Society as inimical to the public health.

Two assembly bills by Assemblymen Mulder of La Crosse and Eber of Milwaukee, both providing in substance that glasses to correct the vision may not be sold on a "fit-yourself" basis. These bills are not as yet numbered.

A measure by Assemblyman Mulder of La Crosse to appropriate $5,000 annually for two years to the State Board of Medical Examiners to permit the board to employ a lay investigator to weed out gross cases of quackery in Wisconsin. This bill is introduced by request of the State Board of Medical Examiners and will have the support of the State Society.

PERMIT REPEAL INTRODUCED

Identical measures have been introduced in both assembly and senate the effect of which would be to repeal the state permit for physicians under the prohibition act. This measure was introduced in the senate by Senator Mehigan of Milwaukee as bill No. 162 S and in the assembly by Assemblyman Millar of Menomonie as bill No. 280 A. The senate bill was scheduled for hearing just as this Journal went to press.

Because of the fact that many bills of interest to physicians had not been printed by the last of February, only a general statement affecting them can be given in this article. Such other measures include the following:

Assemblyman Reis of Madison proposes that when an indigent veteran applies for admission to a state institution, his application shall be given preference.

Assemblyman Loomis of Juneau county has introduced a bill by title only which, it is said, will propose that all war veterans may receive treatment at the Wisconsin General Hospital on a cost of service basis.

The State Board of Health has caused the introduction of the bill, which will be supported by the State Society, to take off the present limitation on salaries for deputy state health officers. A second measure proposed by the Board of Health would provide for county health officers optional with the county boards.

Societies interested in the care of crippled children have proposed a $500,000 state hospital to be erected at Madison. It is their contention that such a hospital will provide for the long convalescent care that is needed at a lower rate than is now available through the Wisconsin General Hospital, and will provide some additional room that seems to them to be essential for the care of such indigent cases.

Assemblyman McDowell of Soldiers Grove has introduced at the request of the State Society a measure to change the charter law of 1841 so as to permit the Society to establish an endowment fund for scientific purposes.

Assemblyman Barber of Marathon county introduced a measure, 17 A, providing that collection agencies must make a report to their clients within ten days of date when collections are made. This measure was scheduled to be heard by the assembly committee on judiciary the last week in February.

A bill to substitute a commission of physicians for a lay jury in the retrial on questions of sanity was defeated in the senate, 18-14, despite the unanimous recommendation by the committee on judiciary. This measure had the strenuous opposition of the Christian Scientists, and while it had the support of the State Society as a worthy public health measure, it did not directly concern physicians.

A more complete summary and statement of measures pending in the legislature will be made in the April issue of the Journal.

In April

At the general election in April there will again be before the electorate a constitutional amendment, the purpose of which is to provide an increase in salaries for members of the legislature. Since 1881 members of the legislature have been receiving $500 and a round trip railroad ticket for two years' service. It is interesting to learn that Dane county expended more money in 1928 as a county than did the state as a whole in 1892.

We need not point out to physicians that this is a ridiculously small and inadequate sum to recompense men who must decide upon budgets involving millions of dollars and laws affecting the well being of nearly three million people. We call this amendment to the attention of our readers in hopes that they will not only vote for it but will use their influence in their respective communities to the end that the amendment may be adopted.

In Which the Doctor's Bills Get *Preferred* Attention

How Mercantile Collection Procedure May Be Applied to the Medical Man's Outstanding Accounts without Overstepping the Bounds of Professional Ethics

By ROBERT R. AURNER, A. M., Ph. D.
Professor, Department of Business Administration, School of Commerce
University of Wisconsin, Madison

In a preceding article in the February issue of *The Wisconsin Medical Journal* I discussed some of the reasons why the medical account is hard to collect. In this paper I should like to outline methods which some of the members of the medical profession are using to advantage in collecting a larger percentage of their slow accounts.

One of the really cogent arguments, it seems to me, is this: in order to preserve the existence of the medical profession, it is as much the ethical duty of its members to make collections definitely and regularly as it is the ethical duty of those members to maintain high professional standards. There is much to be said for the argument that unless a patient pays reasonably for the service of his doctor, he cannot expect to find a doctor available the next time he finds himself in dire need of his services. If the opening statement be granted, then it may likewise be said to be the ethical duty of the members of the medical profession to administer collections in a spirit of sympathetic understanding, with every proper adjustment for the patient's ability to pay and with the exercise of both common sense and ingenuity at all stages of the procedure.

It cannot be gainsaid, that in addition to the eight reasons given in a previous article in this series, medical competition, the desire of the doctor to retain his hold on his patients and to enlarge his practice, often causes him to be hesitant about enforcing collections. And so we are brought to a consideration of some of the broader principles of collection procedure.

A merchant in making collections has two objects: to get the money and to keep the customer. The second is usually not less important than the first, and in the realm of commerce may easily be more important, for the profit on future business done with a man will in all likelihood count up to more than the amount due on any particular account. And yet the first is vital; for when the merchant fails to collect the full amount due, the customer will at once take advantage of his leniency and may give trouble in future. Here, then, is the famous collector's dilemma which later becomes the "Doctor's Dilemma": on the one hand he may push the customer so hard he will take his business elsewhere; and on the other hand he may treat him so leniently that he becomes merely careless and the account in the end costs more to collect than it is worth.

In the matter of falling into this dilemma, the doctor is like the merchant. He tends to think collections a hopeless task and to stand puzzled in the presence of old accounts. Too often he sends monthly statements monotonously alike, sometimes not even regular in schedule. And then suddenly from out of the blue sky may come a formal letter threatening serious action. This is one of the better known ways of losing both the account and the patient. The great secret of systematic cumulative pressure is missing.

EFFECTIVE COLLECTION PROCEDURE

Good collections are based on the following requirements:

Promptness: The effect of promptness on the mind of a patient is that it does not allow the debt to fade from his consciousness or to be covered up by other ideas. If much time passes after his treatments without his being reminded of his obligation, he gives correspondingly and proportionately less thought to his delinquency. The same thing is true if later letters in a collection series are staged at too great intervals. Hence collection reminders should appear promptly on dates carefully predetermined.

Regularity: In the typical collection system regularity requires that some form of collection effort be made on each of the dates specified in the plan. To be regular in sending notifications is to reinforce in the delinquent's mind the power of habit. Just as a man expects to be billed each month for his groceries, so, as a patient, he expects to be billed at regular times for the service of his doctor. To see that this billing is regular, not spasmodic, is to make use of the helpful force of habit.

Systematic Follow-Up: Systematic follow-up of a debtor implies a well-graded series of collection notices graduated through stages of ever increasing pressure up to insistence and urgency. A patient grows to have the utmost respect for a

doctor who pays systematic attention to his collections. It may be said without fear of contradiction that no patient objects to being reminded of his just obligations, if the reminder is prompt, regular, and courteously systematic.

Effective collection procedure falls into four well-defined stages. Here they are:

I. Stage of notification.

This may take the form of a statement on a printed card, handed to the patient at the time of his discharge. The card may be followed with a plain statement at the first of the following month.

II. Stage of reminder.

This may take the form of a statement with a printed sticker, or in the case of a poor credit patient a statement with a typed letter.

III. Stage of discussion.

It is a natural thing to try to come to an understanding with a man who has failed to fulfill his obligation. That is why it is wise to place in the collection procedure what has been well called the "letter of discussion." Along with the wise credit man, the doctor may make use of the force of reasonable appeal. No patient will be found immune to those appeals which weigh upon his instinct of fair play, pride, self-esteem, personal prestige, family affection, good will and cooperation, self interest, good nature, and personal success. Through these fundamental and constructive human appeals, steadily increasing collection pressure may be brought to bear upon the delinquent patient. Take note of the fact that no mention has been made here of appeals to fear, shame, contempt, anger, or the like. If these are ever of any real value in mercantile collections, and well informed credit men are beginning to be dubious about them, they have little use in the doctor's collection kit. Such appeals as these are destructive in nature, tend to undermine a patient's belief in himself, break down the friendly confidence and the personal relation the doctor once established, and weaken the sense of obligation.

The stage of discussion implies the use of a fairly long letter of a personal and confidential nature in which the doctor asks the patient to come in and talk it over, to tell him what the difficulty is, to let him help solve the problem if possible. It may touch lightly upon the care and the willingness with which the medical service was rendered. After the patient replies—not before—the doctor, now definitely on the upper hand of the situation, is in a position to offer help on concrete terms, such as an extension of time, an installment plan of payment with carefully specified dates for the several payments to come, a post-dated check, a signed note, or in some cases a complete remission or cancellation of the charge.

IV. Stage of urgency.

In this stage naturally occur the final appeals. It is not to be inferred that the doctor can make use of any of the antiquated hammer-and-tongs threat devices. No professional man, and no enlightened business man, any longer cares to rain down a shower of fiery denunciations on any man merely because the poor unfortunate happens to owe him a few dollars. Heavy final emphasis will be laid upon pride and shame appeal: "I can't help but feel that after you have received this letter you will want to come in just as a matter of pride in yourself and make a payment on your account. I still have a feeling that you will want to justify my original confidence in you and keep your credit sound among the doctors in (name of city)." This will give a hint of the tone often employed in the stage of urgency. As a last chance, doctors sometimes resort to the collection agency; but the difficulty here is that the agency is interested only in getting the money and cares little about the feelings of the patient or whether the doctor retains the patient's patronage. If the doctor has no objection to the patient being treated rough-shod, the collection agency may prove useful in realizing something on frozen accounts.

Until recently, most members of the

medical profession have felt that legal methods of collection are not feasible because of the nature of the publicity attendant upon a suit in court. This assumption overlooks the fact, however, that much effective work may be done with the delinquent before the matter ever approaches even within hailing distance of a court of law.

In a concluding article in a future issue of *The Wisconsin Medical Journal* I shall hope to present some methods by which the lawyer may be used to help the doctor thaw out frozen accounts, and to demonstrate how the doctor may use the lawyer without going to law.

We have thus far spoken of the general object of all collection procedure. When we narrow the discussion to the medical field, it will be seen that the special object of the collection follow-up system is to get the patient to give preferential attention to his doctor's bill, instead of preferring all other bills to it. The aim is to collect the money within the least possible time and at the lowest expense without alienating the patient or losing his patronage. The goal may be said to be reached when the money is paid and the patient's continued good-will is definitely determined.

Certain axioms may well be kept in mind. Establish a definite credit arrangement with the patient. Maintain prompt and regular billings. Do not allow the patient to forget his obligation. Always treat him with fairness and courtesy. As has been suggested in previous paragraphs, send out a series of reminders and letters, each of which will be more urgent, proportionately, than its predecessor. Let each letter carry the tone of fairness and courtesy. Let the tendency be always to build up the patient's pride in himself and his integrity. Since the collector and the lawyer are more expensive, it is worth while to put some effort on the development of such a series of collection letters.

RE-SALE OF THE GREATEST IMPORTANCE

It is hardly possible to over-emphasize the importance of re-sale in collecting the medical account. We have seen that the farther the patient is allowed to get away from his illness, his treatment, and his consequent recovery, the harder it is to persuade him to pay his bill because he has forgotten the benefits which accrued to him. In other words, the difficulty in collecting is in direct proportion to the length of time that has elapsed since the patient was treated. Re-sale is that process by which is renewed and re-established in the patient's mind the true value of the medical service he received when he was ill.

Success in re-sale is harder to achieve when the commodity dealt with is intangible. It happens that under most circumstances the doctor's service is an intangible commodity, often hard to dramatize, hard to represent in concrete terms. Contrast the situation with the selling of commodities. The man who walks into a clothing store and buys a hat, an overcoat, and a pair of shoes has something to put on his head, on his back, and on his feet. The man who sits behind the steering wheel of a new car has something on which to place his hands with an instinctive sense of possession. The man who agrees to the placing of a radio in his home on trial has a handsome cabinet to look at and a wide variety of sounds to listen to. Even the brightly enameled washing machine, though it means work, has something about it that may be construed as attractive.

On the other hand, there is nothing attractive about illness, nothing pleasant to remember after it is over, and once the patient has recovered it is only with the greatest difficulty that he can recall the exact benefits. When his health is impaired, when he is suffering, when his life is in danger, at these times he would willingly sign over his worldly wealth; for at the moment the sense of the doctor's benefit is strong within him. As this sense of benefit fades away upon his recovery, it must be rebuilt in his mind.

TEARING A LEAF OUT OF THE BOOK OF CLINIC AND HOSPITAL EXPERIENCE

It is at this point that we may do well to take a leaf out of the book of experience which has been compiled by clinics and hospitals. These organizations enjoy an advantage over the doctor in that their services are much more tangible. In the case of the hospital the patient enters perhaps a big building. He is assigned to a definite room. He lies in a bed and is cared for by a nursing service which goes around the clock with him, which administers to his needs as they arise, and which costs money to keep going. All these things he can see. It is not difficult for him, at this particular time, to believe the statement that a hospital carries a very large overhead; that it must

itself pay in cash for expensive services on the part of a large and highly skilled staff of thorough technical training; that the hospital has to foot the bill, again with hard cash, for large amounts of supplies. He can appreciate the fact, if explained to him, that he is getting credit on all these things and that the hospital is carrying him for a considerable period. It can be pointed out to him that if he were in his own home it would be absolutely impossible for him to pay for all these things because the price to him individually would be exorbitant. Moreover, all these points can be clinched by making it evident that the only way the hospital can continue to serve the community is by getting money from the proper and just sources to pay its running expenses and overhead. His bill is one of the bills that must be paid up in full to make this possible.

TANGIBLE ITEMS THAT MAY BE USED IN THE DOCTOR'S COLLECTION LETTERS

In order that we may get a full view of other possible tangible items that may be transferred out of clinic and hospital experience into the doctor's collection letters, let us develop the collection experience of the larger medical organizations still further.

"What would you pay in a good hotel?" inquires the hospital superintendent of a delinquent patient. "You would pay anywhere from $3.00 to $6.00 a day for the room alone. In the hospital what do you get in addition to the room?" Here is a suggested list:

1. Meals.
2. Nursing service — expert, skilled, experienced.
3. Interne supervision—general watchfulness.
4. Leniency in payment methods.
5. General supplies.
6. Medical and surgical supplies.
   It is highly effective, the manager of one hospital has told me, to take the delinquent patient in the office, have him sit down opposite, and tell him just how much cotton and how much gauze are used in the hospital each year, both in terms of amount and in terms of dollars. The patient is almost always surprised at the figures which give him a new idea on at least two items of operating expense.
7. Overhead costs—light, heat, upkeep, depreciation, and so on.

In so far as the doctor can adapt any of this material to his situation, he will find it useful in giving a tangible quality to the service he has rendered his patient.

SHALL BILLING METHODS BE MADE CLEAR?

There is considerable difference of opinion on the subject of itemization of bills. A well known clinic uses the common mercantile device of giving a five per cent discount if the bill is paid within ten days following receipt of notice; but unlike the mercantile house, this organization does not itemize any bills because it finds that this omission avoids much argument over items not understood by the layman. On the other hand, many members of the profession feel that a patient is justified in expecting an itemized statement of the various charges which have been made and which go into the total.

Certainly in the case of hospitals much collection trouble centers around the method employed in billing patients for services rendered. A patient, for example, comes in under the general (sometimes very vague) understanding that he is going to be charged $3.00 or $5.00 for a room. He figures to himself, at the end of his stay that he has been in eleven days; that it will cost him $33.00 or $55.00, according to the room he has selected. When the bill comes in, it probably bears a number of incidentals for such things as (1) the basal metabolism test, (2) x-rays, (3) blood count, and so on, including the anaesthetist's fees, the operating room fee, and other incidental fees.

The difficulty arises, not in the exacting of the fees mentioned, but in the failure to make it clearly known to the patient in advance that these fees will have to be added to the daily room rate; and to make this clear enough so that when the bill is rendered he will not be taken aback with the extras and will not feel, to put it colloquially, that he is being "rooked" by the hospital authorities. It is probably up to the individual doctor to determine whether the lump sum statement or the itemized account brings better results in his particular situation.

OTHER COLLECTION DEVICES THAT ARE MEETING WITH SUCCESS

For the slowest accounts the strategic point in collection follow-up procedure is the stage of discussion, at which time a letter is written whose major object is to draw a reply or to get the patient to come into the office to talk it over. A distinctly better psychological attitude is created

if the patient is induced to come into the doctor's office, rather than having the doctor forced into sending his collection representative to the home of the patient. The doctor, in the surroundings of his office, clothes himself in the prestige of his profession; under these circumstances the patient can be much better made to appreciate the reality of the obligation he has incurred. Experience indicates that tactful and well planned interviews with patients tend to foster good will, to educate them to the proper viewpoint and to smooth out the problem of getting bills paid.

The post-dated check seems in general to be a serviceable method of insuring the payment of doctor's bills. From one point of view the acceptance of post-dated checks gives the doctor a new leverage because it throws the patient into a renewed mental attitude of live obligation. Considerable success seems to have attended the use of post-dated checks, usually not more than five per cent of the checks coming back marked N. S. F. Most of these are straightened out within a reasonable time and funds are deposited to cover. One clinic reports that it has accepted post-dated checks as far as five months ahead with a percentage of loss almost nil.

Like all others who extend credit, doctors are frequently faced with inability to keep track of the whereabouts of many debtors. For patients who are likely to move rapidly, it is wise to get the name and address of the nearest relatives to be used later if necessary as an "anchor." To check up on changed addresses, an effective device is to send a letter addressed:

Present Resident,
2522 Blank Street,
Milwaukee, Wisconsin.

The letter inside may read something as follows: "It will be sincerely appreciated if you will tell us where Mr. A. L. Blank, formerly a resident at the above address, has gone."

To a letter of this kind, helpful replies are usually forthcoming.

THE MILD, CONSTRUCTIVE METHODS ALWAYS PREFERABLE

Available, of course, are other methods both gentle and drastic to go about getting money from a patient. It may be said emphatically, however, that no doctor will gain very much by the use of harsh measures. He would do better to write the accounts off his books and retain his community reputation rather than risk the ill-will which might otherwise be created. One clinic manager who has established a record of 89.78 per cent collections of one years' outstanding accounts (a creditable record), remarked to me some time ago that the longer he is in the business the gentler his collection methods become. He finds it pays.

I do not mean to suggest that in the last analysis the doctor must admit himself helpless in the face of long outstanding accounts, or vulnerable to the attack of the unscrupulous patient. What I wish to point out is that a steadily increasing cumulative pressure can be brought to bear on the patient; not a long and soothing lull, followed by a harsh and violent collection thunderclap. I only wish to emphasize that the place to collect is at the beginning of things and not at the end.

State Society Receives Appreciative Letters Following Annual Gift of Hygeia

Letters from all portions of Wisconsin have been received at the office of the State Society thanking the Society for the annual gift of Hygeia made the first of the year. The State Society sends Hygeia to all members of the legislature, state officers that pass on public health questions, normal school libraries, district attorneys and prominent laymen whose interest in public health is well known.

While it is not possible to publish even extracts from all of the letters received, the following indicate the enthusiastic reception that Hygeia meets from the non-medical public in this state:

Senator John J. Blaine

"We have enjoyed receiving the magazine."

Senator Robert M. La Follette, Jr.

"Thank you, and through you, the State Medical Society for continuing my name on the subscription list of Hygeia."

Congressman Florian Lampert

"I have read the magazine with a great deal of interest and found it to be of great value."

Congressman Henry Allen Cooper

"Only a word to thank you for your letter notifying me that you will continue sending me Hygeia during the coming year. I shall be glad to receive it."

Congressman Charles A. Kading

"I will continue to enjoy reading the same during the coming year."

Justice E. Ray Stevens
State Supreme Court

"None of the Christmas Greetings that Mrs. Stevens and I received were appreciated more than the one which brings the good news that the State Medical Society has again made us a Christmas present of a year's subscription to Hygeia. There is no periodical that comes to our home that is read with more interest or that contains more interesting matter."

Senator Merritt F. White
Winneconne

"We greatly appreciate the information gleaned from this magazine."

District Attorney W. C. Crocker, Jr.
Eau Claire

"The work of your organization is only too well known and it is indeed with great pleasure that I feel that you have affiliated me with your organization."

River Falls Normal

"This is becoming an increasingly popular magazine with both students and faculty."

State Treasurer Solomon Levitan

"It was very thoughtful of you to remember me at Christmas time with a year's subscription to Hygeia, and I thank you sincerely for it."

Assemblyman E. G. Smith
Beloit

"On the 20th I received a letter from you stating that you would continue my Hygeia. I want to thank you for this; I have had the paper regularly for the past year and I have read it as regularly as it came and have found it one of the most delightful publications that come to my desk. I take it home and read it in the evening when I have the time and the relaxation to thoroughly enjoy it."

Lieut.-Gov. Henry A. Huber

"We enjoy reading the contributions which are not only interesting but illuminating as well."

District Attorney R. W. Peterson
Berlin

"I do not hesitate in saying, that although I subscribe to several magazines, I look forward with greater interest to the coming of Hygeia, than of any other paper."

Senator Conrad Shearer
Kenosha

"I beg to acknowledge your kind favor of the 20th inst., in reference to Hygeia. It is a pleasure, I assure you, to know that this fine health magazine will be a regular visitor to my home during 1929."

Senator Oscar Morris
Milwaukee

"Of course, if Hygeia were not sent to me as a gift from the State Medical Society, I would subscribe to it, so you see you are out just that much money."

John J. Hannan, Pres.,
State Board of Control

"Thank you for again placing me on the list of those who are to receive Hygeia. I found the Journal very interesting and profitable."

District Attorney J. V. Ledvina
Park Falls

"I desire to thank you for the Hygeia subscription. I read Hygeia from cover to cover and find it very interesting and of real value.

"If it were possible to place Hygeia in the hands of every adult person it would be a great boon for the preservation of health and the prevention of disease."

WALTER J. KOHLER
KOHLER, WISCONSIN

December 22, 1928.

Mr. J. G. Crownhert, Sec'y,
The Stete Medicel Society of Wisconsin,
Medieon, Wisconsin.

Deer Mr. Crownhert:

Your letter of December 20th, informing me of the sot of the members of the Stete Medicel Society in sending me e yeer's eubscription to "Hygeie" pleesed me very much.

I shall be deeply interested in receiving this publicstion end following the effaire of the Stete Medical Society of Wisconsin.

Diseaee prevention is one of the mejor functione of civilized society end ite furtherance should receive the support of all citizens.

With best wishee,

Sincerely yours,

WJK:RK

Walter J. Kohler

Sen. Howard Teasdale
Sparta

"My wife and I join in our sincere thanks for the renewal of Hygeia for the coming year. Wife thinks that it is law and I have to try hard from keeping getting starved to death, following your orders for the betterment of my health."

Justice Marvin B. Rosenberry
State Supreme Court

"I have your letter of December 20th, advising me that the 'Hygeia' will come to me for another year. I really enjoy this magazine very much and thank you for sending it."

Whitewater Normal

"We do indeed find 'Hygeia' a very attractive and a very useful magazine. The magazine is *used.*"

William T. Evjue, Editor
Capital Times

"I have found Hygeia a most interesting magazine and am heartily in accord with its efforts in the great work of disease prevention. The public needs more publications of its type."

Attorney Max Sells
Florence

"We find if very instructive and think your Society is doing great work."

District Attorney Herman C. Runge
Sheboygan

"I assure you that the publication is very much enjoyed and read with much interest."

Assemblyman Walter N. Beck
Fond du Lac

"I wish to thank the State Medical Society for the subscription to 'Hygeia.' I will be glad to support any wise legislation in this regard."

Attorney Edward J. Dempsey
Oshkosh

"You are assured that your kindness to me in this matter is very much appreciated."

Stevens Point Normal

"We have used the periodical extensively in the past, so that we are glad to have you continue it."

Zona Gale

"Thank you so much for your letter with the announcement of the new gift of Hyegia for this coming year. I appreciate the magazine and the courtesy and I shall hope to make it of use to myself and to pass it on to others."

La Crosse Normal

"We make very good use of the magazine in the library, and are glad to have it."

District Attorney A. C. Barrett
Spooner

"I have received the magazine Hygeia, during the last two years and have learned to appreciate it very much. I take a great deal of satisfaction in knowing that I will receive it for the coming year."

A. E. Garey, Secy.,
Civil Service Commission

"I have enjoyed reading this health magazine due to your thoughtfulness for a number of years, and I take this opportunity to tell you that I value it highly."

Daniel H. Grady
University Regent

"I have enjoyed your publication and deeply appreciate this kindly remembrance."

District Attorney G. Arthur Johnston
Ashland

"I wish to thank you for your subscription to the Hygeia and advise that the magazine is kept on the reading table in my office in order that my clients, while waiting, may have the benefit of it."

F. M. Wilcox, Chairman
Industrial Commission

"I want you to know how thoroughly I appreciate this magazine and also the issues of the Wisconsin State Medical Journal. They are really helpful to me in my commission work."

C. E. Broughton, Editor
Sheboygan Press

"While I have not had the opportunity to follow all of the magazines as issued, on two or three occasions I have been much interested in the articles. You know how it is in the newspaper grind. We would like to read a great deal more than we do, but opportunity does not afford."

Mrs. A. H. Shoemaker
Eau Claire
"The Wisconsin Club Woman"

"Your letter just came telling me of your gift to me of the splendid magazine, Hygeia, and I wish to assure you that it is a gift deeply appreciated and I thank you personally as well as the State Medical Society for it. I am a constant reader of it and have gained much information on health matters. I have loaned it in my neighborhood and it may result in some subscriptions for the magazine. I hope so."

Eau Claire Normal

"We find this magazine very useful indeed. In fact would have difficulty doing without it."

District Attorney Paul B. Conley
Darlington

"This is one magazine that I read each time it is received and I find a great deal of interest contained therein."

State Board of Health Reports 1928 Vital Statistics

While Wisconsin enjoyed a lessened mortality from a number of communicable diseases during 1928, the flare-up of influenza and pneumonia as the year ended and increased deaths from constitutional diseases offset this decline and made the state's death rate higher than it has been during the past five years. With some reports still to come, it is expected the rate for the state will be approximately 11 per thousand population. The rate for 1927 was 10.4. The figures were announced today by the state board of health.

The year witnessed further declines in deaths from typhoid fever, smallpox, measles, diphtheria, enteritis in children under 2, and infantile paralysis.

Typhoid fever, with only 23 deaths in the entire state, five of which were of the mild type known as paratyphoid, struck the lowest point ever reached in Wisconsin. This total represents about three-fourths of one death per thousand population.

With a few reports still due, officials were able to predict the lowest death rate for tuberculosis in the history of the state. It is believed final figures will show Wisconsin to have passed the year with fewer than 1,700 deaths from tuberculosis.

Another uncommonly low death total was credited to measles. Only 13 deaths made up the year's record. It is believed this is not equalled in any other state with a comparable population. Measles often spreads until most susceptibles have had it, and reporting and placarding are often neglected. In the last three years Wisconsin has found it possible to control measles outbreaks by employing strict enforcement measures. The disease is especially fatal among young children, serious complications often ensuing.

Smallpox gave the state only two deaths in 1928. This low fatality is credited to the general vaccination fol-

(Continued on Page XXVI)

THE JOURNAL BOOK SHELF

Treatment of Disease in Infants and Children. By Hans Kleinschmidt, M. D., professor of Pediatrics, University of Hamburg. Authorized translation of the fifth German edition with additions by Harry M. Greenwald, M. D., attending pediatrician to the United Israel Zion Hospital, Brooklyn, N. Y. P. Blakiston's Son & Co., Philadelphia.

Infancy and Human Growth. By Arnold Gessell, M. D., director, Yale Psycho-Clinic, professor of Child Hygiene, Institute of Psychology, Yale University. The Macmillan Company, New York, 1928.

The Simple Goitres. By Robert McGarrison, M. D., associate fellow of the College of Physicians, Philadelphia. Price $4.00. Wm. Wood & Company, New York, 1928.

Operative Surgery. By J. Shelton Horsley, M. D., attending surgeon, St. Elizabeth's Hospital, Richmond, Va. With 765 illustrations. Third edition. Price $15.00 C. V. Mosby Company, St. Louis, 1928.

Roentgenology. Its early history, some basic physical principles and the protective measures. By G. W. C. Kaye. With forty-nine illustrations. Price $2.00 net. Paul B. Hoeber, Inc., New York.

BOOKS RECEIVED FOR REVIEW

Certified Milk. Proceedings of American Association of Medical Milk Commissions, Inc., 1928.

Thyroxine. By Edward C. Kendall, M. S., the Mayo Foundation, Rochester, Minn. Price $5.50. Book Dept., Chemical Catalog Co., Inc., New York City, 1929.

The Blood Plasma in Health and Disease. By J. W. Pickering, D. Sc., lecturer on Haematology, University of London, King's College. The Macmillan Company, New York, 1928.

Thrombo-Angiitis Obliterans. Clinical, physiologic and pathologic studies. By George E. Brown, M. D., and Edgar V. Allen, M. D., Division of Medicine, Mayo Clinic; collaborating in pathology with Howard R. Mahorner, M. D., Mayo Foundation. 12mo of 219 pages with 62 illustrations. Price $3.00 net. W. B. Saunders Company, Philadelphia and London.

Problems in Surgery. University of Washington Graduate Medical Lectures for 1927. By George W. Crile, M. D., edited by Amy F. Rowland. Octavo volume of 171 pages, illustrated. Price $4.00 net. W. B. Saunders Company, Philadelphia and London.

Regional Anesthesia. By Gaston Labat, M. D., clinical professor of surgery, University and Bellevue Hospital Medical College, New York City. With a foreword by William J. Mayo, M. D. Second edition, revised. Octavo of 567 pages with 367 original illustrations. Price $7.50. W. B. Saunders Company, Philadelphia and London, 1928.

A Text-Book of Surgery. By W. Wayne Babcock, M. D., professor of surgery and clinical surgery in the Temple University, Philadelphia. Octavo of 1367 pages with 1050 illustrations, 9 of them in colors. Price, $10.00 net. W. B. Saunders Company, Philadelphia and London, 1928.

Textbook of Clinical Neurology. For students and practitioners. By M. Neustaedter, M. D., clinical professor in neurology, New York Polyclinic Medical School and Hospital. With an introduction by Edward D. Fisher, M. D., professor emeritus of neurology, University and Bellevue Hospital Medical College, New York. With 228 illustrations, some in colors. Price $6.00 net. F. A. Davis Company, Philadelphia, 1929.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Secretary, Mr. J. G. Crownhart, 119 E. Washington Ave., Madison, Wisconsin. These new books will be loaned for an inspection period only.

Bronchial Asthma. Its Diagnosis and Treatment. By Harry L. Alexander, M. D., associate professor of medicine in the Washington University Medical School, St. Louis, Mo. Illustrated. Price $2.25 net. Lea & Febiger, Philadelphia.

The work done within recent years on the subject of allergy makes a contribution of this nature very welcome. In this book the author discusses the newer theories concerning asthma and correlates them with the older views on the subject. The pathologic physiology of bronchial asthma and the mechanism of the paroxysm are presented in a clear and brief manner. He differentiates the various cardio-respiratory diseases from asthma. The matter of treatment is presented from the standpoint that the condition develops in hypersensitive subjects after contact with a particular allergen. Many bibliographic references are found at the end of each chapter.—F. D. M.

Acute Infectious Diseases. By Jay Frank Schamberg, M. D., professor of dermatology and syphilology in the Graduate School of Medicine, U. of Penn., and John A. Kolmer, M. D., professor of pathology and bacteriology in the Graduate School of Medicine, of the U. of Penn. Second edition, thoroughly revised. Illustrated with 161 engravings and 27 full-page plates. Price $10.00 net. Lea & Febiger, Philadelphia, 1928.

The recent developments in connection with prophylaxis and treatment of infectious diseases are discussed in this edition. A detailed account is given of the clinical and pathological features of the commoner acute infectious diseases. The newer tests of susceptibility and immunity and specific serum treatment of diphtheria, scarlet fever, and erysipelas are fully presented. There are many illustrative photographs, some of which are colored, along with an abundance of statistical data which add to the completeness of this edition.

This book is no abstract of the subject, but it contains a full account of these diseases with their differential diagnoses and complications and treatment.—F. D. M.

Pediatrics for the General Practitioner. By Harry Monroe McClanahan, M. D., professor of pediatrics emeritus, University of Nebraska. Two hundred and thirty illus-

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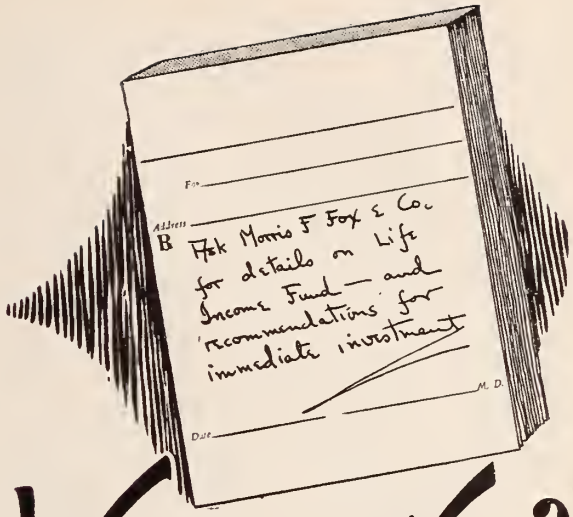

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trations. Price $6.00. J. B. Lippincott Co., Philadelphia and London.

This treatise, according to the author, is designed primarily for the general practitioner. It is supposed to be free from theoretical consideration and entirely practical. The fallacy of such an intention is evident when one glances through the book. It is impossible to treat disease intelligently unless one is familiar with basic principles, and anyone who blindly follows empirical dogma will certainly meet with failure. If one compares this textbook to that of Holt, the difference is readily apparent. Holt's text is of equal value to the general practitioner, the student or the specialist. It is both theoretical and practical and therefore a valuable book. Dr. McClanahan's volume would be far more satisfactory if the material were knit more closely together and not as many abstracts of other men's work incorporated through the text. The long experience of a pediatrist such as Dr. McClanahan should be of benefit to the profession and it is therefore regrettable that it is not presented in a different manner.—R. G.

History of Medicine, With Medical Chronology. Suggestions for study and bibliographic data by Fielding H. Garrison, M. D., Lt., Colonel, Medical Corps, U. S. Army, Surgeon-General's Office, Washington, D. C. Fourth edition, revised and enlarged. Octavo of 996 pages, with 286 portraits and other illustrations. W. B. Saunders Company, Philadelphia and London, 1929. Cloth, $12.00 net.

"An English History of Medicine which may compare even with the least of the continental histories * * * has yet to be written."—Introduction to Withington's Medical History.

"No English writer on the History of Medicine can fail to refer to the great work of Lt. Col. Fielding H. Garrison."—Preface to Singer's Short History of Medicine.

Those who read German will find Haeser's "Geschichte der Medizin" and Neuberger und Pagel's "Handbuch der Geschichte der Medizin" good reference books for dates and bibliography. In addition to these Neuberger's "Geschichte der Medizin" (there is an English translation) and Meyer-Steineg und Ludhoff's "Geschichte der Medizin in Ueberblick mit Abbildungen" furnish valuable information. In French there is Daremberg's "Historie des Sciences Medicales," and the small work of Meunier. For the reader of Scandinavian Chievitz's "Anatomians Historie" will be interesting, not only for the text, but also for the excellent illustrations which are found on nearly every page. In Italian, Castiglioni's "Storia della Medicina" gives a very complete account of Italian medicine and contains many illustrations not found elsewhere. In English there is Handerson's translation of Baas' "History of Medicine" (if you have a copy, treasure it; if not, and have the opportunity, buy it); the same may be said of Withinton's "Medical History." Last *and best of all* we have Garrison's History of Medicine, in which he has combined the best features of the earlier histories of medicine with many of his own.

In the interval between the third and fourth editions of Garrison a number of works on medical history have been published, some of which belie their title.

The present edition of Garrison is especially strong in the history of modern medicine, a feature which is lamentably weak in other histories. A very pleasing feature is the number of portraits. These have been increased in the present edition and some in the previous edition have been replaced with new or better portraits. Especially pleasing is the panel of the three Monros (the reviewer had the pleasure of being in Col. Garrison's office the afternoon he arranged this panel).

The chronology of medicine (Appendix I), which shows at a glance any important event or discovery in medicine taking place between B. C. 7000 and June 12, 1928, required long months of patient research. For the student of medical history and medical biography, Appendix III will prove of invaluable assistance.

The last chapter, "Cultural and Social Aspects of Modern Medicine," contains facts in regard to Russian, Spanish and Latin-American medicine not elsewhere accessible. The fact that Soviet Russia is doing so much in "exploiting public, rural and personal hygiene" will come as a surprise to most readers.

England has not as yet produced a work on medical history; but we have in Garrison's History of Medicine an English history of medicine, written by an American, and Withington's statement quoted above no longer holds true.

William Snow Miller.

Blood. A study in general physiology. By Lawrence J. Henderson, professor of biological chemistry in Harvard University. More than 200 illustrations. Price $5.00. Yale University Press, New Haven, 1928.

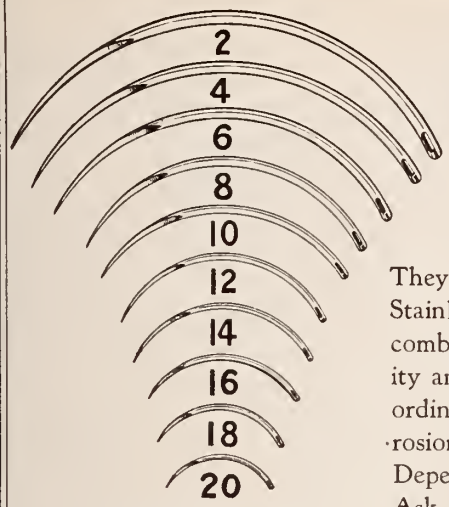
The Silliman Memorial lectures delivered in 1928 have been somewhat amplified in this book. More and more, physiologists are bringing to the medical profession the application of physical and chemical laws as worked out experimentally. Henderson is one of the foremost of these, and his contributions are too well known to need comment. Doctors with an interest in the fundamental sciences will read this book with much pleasure; all may read it with profit. Unless the reader has kept in close touch with the investigations in blood physiology, he will learn of many changes in viewpoint and of many new facts from these lectures. N. E.

Partnerships, Combinations and Antagonisms in Disease. By Edward C. B. Ibotson, M. D., Fellow Royal Society of Medicine, London. Illustrated. Price $3.50 net. F. A. Davis Company, Philadelphia.

The title is promising. The theme is one that should offer wide opportunity for careful investigation and study. One approaches the book, therefore, with a hope of getting some real information on a much neglected topic. But in this respect the book is very disappointing.

The author apparently has had considerable experience in medicine, has been a careful observer and doubtless a good clinician, but has failed to concentrate his knowledge and clinical experience on the particular subject he has chosen to write about. The result is a heterogeneous mass of unrelated information distributed through the work more or less at random.

The major portion of the book deals with relationships in disease, and for examples are cited, for instance: the concurrence of typhoid fever and tuberculosis; scarlet fever and pneumonia; cerebro-spinal fever and pericarditis; etc. Most of the cited examples are not real relationships but are either mere coincidences or the superimposition of one disease upon another because of the lessened resist-



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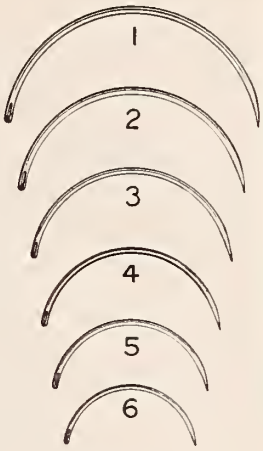

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ance induced by the primary disease. Others are nothing more than complications associated with a disease.

On the topic that would be of real interest, true partnerships and antagonisms in disease, the author has little to say. For instance, the outstanding example of an antagonism, syphilis and malaria, he dismisses with the observation that it is probably due to the rise in temperature brought on by the malarial organism. The interesting field of bacterial symbiosis is only cursorily scanned, with no new offering. The book contains much clinical information of varied character, but is certainly no scientific contribution to the subject with which it deals. J. J. S.

Laboratory Manual of the Massachusetts General Hospital. By Roy R. Wheeler, M. D., and F. T. Hunter, M. D. Second edition, enlarged and thoroughly revised. Price $1.75 net. Lea & Febiger, Philadelphia.

This very concise manual gives an excellent detailed outline of most of the procedures performed in a clinical laboratory. There has been great economy of words. The directions are clear and easily understood. It has been brought up to date by the addition of recent procedures such as the liver function test. In addition to laboratory procedures there are several paragraphs devoted to intravenous and other therapeutic procedures. This little manual is valuable to physicians in practice as well as serving as a handy reference for students in the laboratory. Hospital internes might very well have one in their pockets. N. E.

Compend of Diseases of the Skin. By Jay Frank Schamberg, M. D., professor of dermatology and syphilology, Graduate School of Medicine, University of Pennsylvania. Eighth edition, revised and enlarged with 127 illustrations. Price $2.00 net. P. Blakiston's Son & Co., Philadelphia.

In preparing his first edition the author referred to his compend as "a key to the study of dermatology." It is essentially that, for while there is no short cut to a knowledge of dermatology, this outline may well serve as the ground work for further study. In presenting the essentials of the subject in a concise and dogmatic manner to the student the latter is enabled to visualize the field of cutaneous medicine with less confusion than entails the first attempt to study a reference book.

The illustrations are good, the classification is clear, the text is replete with diagnostic tables, suitable prescriptions are included, and important subject matter is given its proper share of space. This compend, of course, is not intended to replace either text or reference books, but to introduce them or to serve as a review.

Written by an international authority on dermatology and syphilology, a teacher of the first rank, Professor Schamberg's compend really needs no indorsements. The fact that the present is the eighth edition attests its popularity and worth. H. R. F.

Outlines of Pathology in its historical, philosophical, and scientific foundations. A guide for students and practitioners of medicine. By Horst Oertel, Strathcona professor of pathology, McGill University, Montreal. Renouf Publishing Company, McGill College Avenue, Montreal.

The author has deviated from the usual traditional method of writing textbooks replete with details. He has compiled in this one volume the essential facts concerned in the teaching of pathology. The book is written primarily as a guide and for the use of students and general practitioners of medicine. The author has succeeded admirably in bringing out in a well written and well arranged form the main changes concerned in pathological lesions.

The chapters on immunity and tumors are very interestingly written and bring out clearly the fundamental conceptions of these subjects. The microphotographs, demonstrating the various types of tumors or neoplasms, have been selected carefully and aid the student in arriving at a correct diagnosis. The other subjects are handled equally well. The notes and references at the end of each chapter are helpful.

The author should be commended on the clear exposition of a difficult subject. H. T. K.

Thrombo-Angiitis Obliterans. Clinical, physiologic, and pathologic studies. By George E. Brown, M. D., and Edgar V. Allen, M. D., Division of Medicine, Mayo Clinic; collaborating in pathology with Howard R. Mahorner, M. D., Mayo Foundation. 12mo of 219 pages with 62 illustrations. Price $3.00 net. W. B. Saunders Company, Philadelphia and London.

In spite of the fact that arteriosclerosis and gangrene are well recognized conditions, the vascular diseases of the extremities have received scant attention. In this book thrombo-angiitis obliterans is fully considered. The histological changes in the vessels as contrasted with arteriosclerosis are presented in detail; the intimal changes are given special consideration. It is emphasized that this disease has not been given enough thought by physicians and it is shown that the disease is commonly diagnosed "Raynauds" or "fallen arches." The various signs and symptoms of the disease are clearly described and the differential diagnosis is very complete. Some special methods of investigation are described. Since this disease may be treated either medically or surgically at different stages, both forms of treatment are described.

This is an excellent presentation of the subject of thrombo-angiitis obliterans and should find a place in the hands of general practitioners, internists, and surgeons and orthopedists. F. D. M.

The Blood Plasma in Health and Disease. By J. W. Pickering, D. Sc., lecturer on Haematology, University of London, King's College. The Macmillan Company, New York, 1928.

In this monograph the author gives detailed information concerning the subject of blood coaguability. The many factors that relate to intra-vascular and extra vascular clotting are described. Hemophilia, thrombosis and arrest of hemorrhage are subjects of great interest that are fully described in this book from the hematologist's viewpoint.

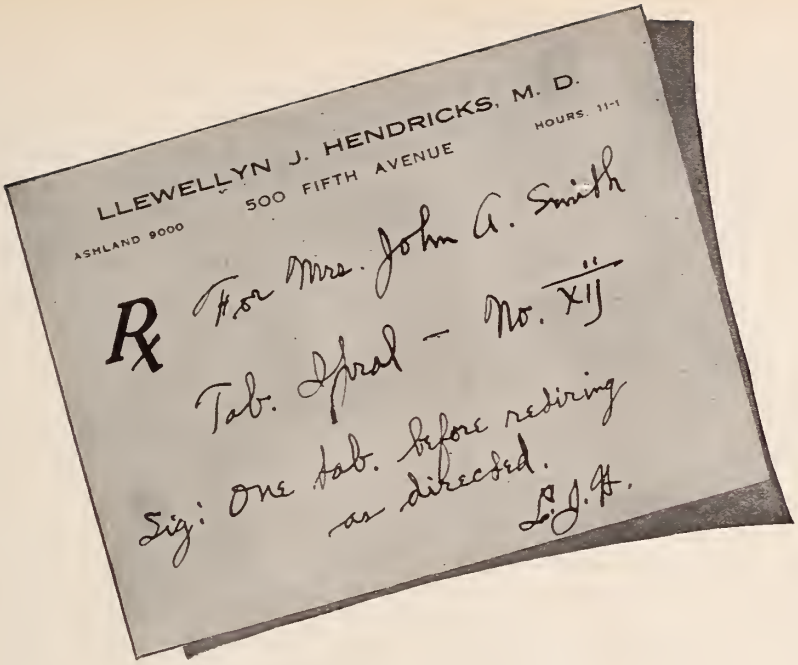
The recent facts bearing on blood plasma changes in hemorrhagic diseases are brought together in this volume. It is an important contribution to the field of hematology. F. D. M.

1928 VITAL STATISTICS

(Continued from page 143)

lowing the 1925 epidemic.

"The low mortality from smallpox should give us no false sense of security," the report commented. "There should be no letup in the campaign to have as many as



As a hypnotic,

IPRAL SQUIBB

{calcium ethylisopropylbarbiturate}

Approximates the following desirable qualities:

"The ideal hypnotic should possess a rapid action. The dosage should be small with a wide latitude between the therapeutic and lethal doses. It should be free from immunizing effect, should not color the urine—an indication of destruction of red blood corpuscles—and it should be free from depressing action upon the heart. Finally, it should not cause the patient to have a feeling of 'dopiness' or drowsiness upon awakening. Moreover, its action should be selective, only the highest cerebral cells being affected by even large doses."*

"It has been used by many physicians in a great variety of cases, and so far no untoward effects upon the heart, lungs or kidneys have been noted."*

DOSAGE: As a sedative, or for ordinary insomnia, one or two Ipral tablets (2 to 4 gr.) are usually sufficient. As a hypnotic, two Ipral tablets (4 gr.) are usually effective.

*Jackson, D. E. and Lurie, L. A.: Experimental and clinical observations on the actions and therapeutic uses of ethylisopropylbarbituric acid. *Jour. of Laboratory and Clinical Medicine,* **11**:116.

E·R·SQUIBB & SONS, NEW YORK

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.

possible immune to smallpox through successful vaccination. Wherever there is a large non-immune population, a serious outbreak of malignant smallpox sooner or later will develop."

With 72 deaths from scarlet fever, this malady showed an increase of nine deaths over 1927. Prior to 1925, however, the annual scarlet fever mortality had usually been 200 or more.

"It seems quite likely," the report added, "in view of the large number of cases reported that scarlet fever antitoxin given in therapeutic doses when a case is first recognized has been an important factor in reducing the death rate and the number of serious complications."

Diphtheria produced the smallest number of deaths that has been recorded in the state for at least 20 years. The total was 98. Toxin-antitoxin for prevention and antitoxin for cure of cases are the important factors credited for this decline. The toxin-antitoxin program is making headway in both urban and rural districts in nearly every section of the state.

That the influenza epidemic which struck Wisconsin in November was unusually severe is indicated by the marked increase in its mortality over the 1927 total. The mortality in fact was more than twice as large and is sufficient proof it is claimed, that the type was a severe one. Pneumonia was another factor. The report estimates that the epidemic cost more than 1,100 lives in Wisconsin.

As recently noted, cancer presented practically no increase in deaths during the past three years. This is regarded as a very hopeful sign, and hope was expressed that the peak in this death rate has been reached.

The state was comparatively free from infantile paralysis last year. There were 15 deaths—a smaller number than in any year since 1920. Sleeping sickness, however, furnished 46 deaths as compared with 32 in 1927.

Among important causes of death in 1928 were the following: Pulmonary tuberculosis, 1,391; other tuberculosis, 235; typhoid fever, 23; diphtheria, 98; scarlet fever, 72; measles, 13; whooping cough, 79; pneumonia, 2,556; diarrhea, enteritis, under 2 years, 334; meningitis, 66; influenza, 1,275; puerperal septicemia, 75; cancer, 3,064; violence, 2,459.

JOURNAL CLINICAL CLUB

University of Wisconsin

ULCER, GASTRIC AND DUODENAL

Professor Dr. Egbert Schwarz,
Arch. f. Klinische Chirurgie 151. Band 3 Heft. Pg. 445.
Ergebnisse der Operativen Therapie des Chronischen Magen-und Duodenalgeschwaüs. Resultate nach Gastroenterostomie und Magenresection, insbesondere der methode nach Reichel.

Because with a stenosis at the pylorus or in the middle of the stomach, a gastroenterostomy gave good results, it was tried in other conditions of the stomach, even when an ulcer was not present, and we are now seeing the bad results. Realization has come that an ulcer of the stomach is a disease of the whole stomach, and has caused resection to be the favored method.

Of 316 stomach resections, 243 were after the method of Reichel, and reason was because no attention had to be paid to the amount of stomach removed in order to complete operation. In Bellroth I and the sleeve resection of Riedel there were several complications, such as retention of stomach contents.

Regarding Billroth I there were eleven cases and no primary mortality, good subjective results, but a form and function of the stomach which was not to be desired. There were no recurrences.

The sleeve resection showed four recurrent ulcers in 51 cases, and all recurrences were in the suture line.

Billroth II (typical)—they had eleven cases; five cases died, either of pneumonia or peritonitis.

Speaking of the Reichel resection, they find that ulcers of the body of the stomach are decreasing and the ulcers near the pylorus and duodenum are increasing. Women have less ulcers of the stomach, and in general there are less large callous and penetrating ulcers into the liver, pancreas, spleen and abdominal wall, and all ulcers are seen earlier. The resectability of the duodenal ulcer was about 190 to 20. Their best mortality is between 8-10%. Cardiac failures, lung complications, peritonitis, sepsis, result of splanchnic anaesthesia diagnostic procedure is not a great help, as the ordinary Roentgen injection does not readily show the stasis, and the author advises using a sound in the duodenum and filling it with barium. Different methods have been used to relieve this condition surgically.

Melchior separated some adhesions, and his immediate result was good.

Miyake has done fixation of the mobile part and in addition shortening of the duodenal ligament. The author proposes the duodenal jejunostomy, and where there is a good deal of pylorospasm, advises a Finney pyloroplasty. He cites one case.

RADIOGRAPHY OF NORMAL LARYNX

P. M. Hickey, A. B., M. D.,
Ann Arbor, Michigan.
Radiology, November, 1928.

Mention of previous work: Thost, Iglauer & Lang.
Four types of motion in the larynx overcome by suspension of breathing, keeping still, flash exposure.

In the male, the thyroid cartilage shows lime deposit more conspicously than in the female. Lime deposit in the female occurs principally in the cricoid cartilage. Normal radiograph of larynx shows the air column in the laryngo-pharynx, the hyoid bone, the epiglottis, the thyroid and cricoid cartilage and sometimes the arytenoid cartilages. Radiographic examination of the larynx is oftentimes of importance in studying the changes produced by benign neoplasms, carcinoma and tuberculosis.

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The Liver; Recent Advances in Our Knowledge of the Physiology*

By FRANK C. MANN, M. D.

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It usually worries me considerably to attempt to give results of experimental work or some of the facts in physiology before a group of active clinical men. It is very difficult, and usually impossible, to translate physiology into terms of practical clinical medicine. I am not worried about it quite so much this time, because I am going to let the practical part fall on Dr. Walters. Therefore I feel free to tell you some of the things concerning the physiology of the liver which will not be at all practical.

I do not believe the stage has yet been reached in which much of the newer physiology of the liver can be applied to clinical medicine. The value, however, in knowing something about this organ lies, I think, in the future possibilities of using such facts in clinical medicine. As you know, it was not many years ago when the butcher was willing to throw in a piece of liver with the steak that you bought. And now liver is one of the highest priced meats on the New York market. I think our knowledge and evaluation of the organ in clinical medicine will increase in similar proportion.

In the past, the physician has been interested mainly in three conditions associated with the liver: jaundice, cirrhosis, and disease of the biliary tract. I suppose I should add the common condition, so-called, of biliousness. Some of these conditions touch on the liver, and some do not. One of the important things that I wish to emphasize (if you do not care to carry anything more—with you than this one fact) is this: of all the organs in the body the liver has possibly the greatest power of restoration after removal or injury. Probably no other organ of the body will withstand the assaults on it and come back, to use the familiar expression, as well as the liver.

You are probably all familiar with the work of Whipple on the effect of chloroform on the liver and know how quickly it regenerates following enormous injury. The same is true with actual removal of the organ. The liver of the dog is made up of many separate lobes. It is possible to take out one lobe or two lobes of liver, which will amount to an estimated 40 per cent of the total amount of the organ. In a few weeks' time the animal has as much liver as he had before operation. A few more lobes can be taken out, and the process can be repeated until only one lobe is left. A few weeks after all but one lobe has been removed the animal will have as much liver as he had at first. More liver has been removed than the animal had normally, and at the end he had as much as or more than when the experiment started. The great restorative capacity of the liver is of the greatest importance in view of the fact that the organ has, at least, one or two functions which are vital to the life of the organism, and many more subsidiary functions.

The function of the liver which is most familiar, because it is the oldest known function, and the one which shows itself in the color of the faces of many of your patients, is that of secreting bile; the bile secretory function of the liver. The bile contains three important constituents concerning which certain facts are known.

First, I would mention the bile pigment: it is not of great importance physiologically, or even clinically, except as an indicator of hepatic function, because probably it is an excretory substance. It is formed from hemoglobin but probably not by the liver. As you know, the liver has three functioning cells: the true hepatic cell, the so-called stellate or von Kupffer cell, and the cells lining the bile ducts. I will not give attention to the last for the time is short, but these cells probably have a function other than just that of draining bile away from the liver.

The stellate cells have some very definite functions in regard to mineral metabolism. They will store large amounts of iron, and this is probably

*Read before the 87th Anniversary Meeting of the State Medical Society of Wisconsin, Milwaukee, September, 1928.

the only cell in the liver which will make bile pigment. The amount it makes under normal conditions is probably only a small percentage of the total amount of bile pigment made. The bile pigment is made from hemoglobin and probably is made mainly in the bone marrow, the spleen and the stellate cells of the liver.

The true hepatic cell is the one that has practically all the other functions. It is the cell which takes bile pigment from the blood and excretes it in the biliary tract. The other constituents of bile, such as cholesterol or bile acids, I cannot say much about, because so little is known about them. Evidence from the recent work would tend to show, although not conclusively, that bile salts are made in the liver, and that they have two functions: one has to do with the absorption of fat, and the other probably with stimulation to hepatic activity.

So much for the bile secreting function of the liver. The function of the liver which probably is of most importance, because it is a vital function, is that which has to do with carbohydrate metabolism. As you know, almost a century ago Claude Bernard discovered a particular type of carbohydrate in the liver, glycogen, and we have known from that time that the liver had considerable to do with carbohydrate metabolism. We do not know the method whereby the liver makes glycogen from glucose, or changes glycogen into glucose, and the conditions under which or how these processes occur. We do know, however, that a certain concentration of glucose in the blood is necessary for life. When the amount is greater than a certain narrow margin, we have a condition of hyperglycemia, and we know the organism is not normal. When it is below a certain level, we have the condition of hypoglycemia. Symptoms will set in and death will occur.

The liver has the important function of maintaining the concentration of sugar in the blood. Without the liver performing this function at each and every minute of the time, death would ensue. Not only does it maintain the level of blood sugar under normal conditions, but the liver is responsible for the hyperglycemia, those increases in blood sugar that occur under various conditions. It is responsible for the hyperglycemia associated with loss of pancreas or disease of the pancreas. It is the organ which causes the increase in the blood sugar following such a procedure as anesthesia and operation, and the action of certain drugs, such as epinephrine. And you are all familiar, of course, with the action of insulin.

I might state that the hypoglycemic action of insulin does not depend on the liver, but the liver is the organ which restores the blood sugar level, following the action of insulin. In order to take over this particular function of the liver, that of maintaining the blood sugar, it is necessary to add a certain definite amount of glucose to the blood stream continuously in animals in which the liver has been removed. Although the amount of glycogen in the liver and muscles of the body is approximately equal, the glycogen in the muscles seems to have little or nothing to do with maintaining the level of blood sugar; that is done by the liver. I wish to emphasize this function, because it has been found that one of the few ways in which the liver can be helped is by the administration of glucose.

The liver has other important functions in regard to metabolism. As you know, when protein is taken into the body as meat, it is broken down into its various constituents, the amino acids, and absorbed. The amino acids have assigned to them one of three fates. They are used to build up living protoplasm, a process concerning which little is known, or the nitrogenous portion is broken off and secreted as urea, and the remaining portion is burned, the same as carbohydrate, or they are stored in the so-called deposit proteins. The liver is necessary for the second of these, namely, the splitting off of the nitrogen from the amino acid, deaminization and formation of the nitrogen into a substance easily secreted, urea, dependent on the liver. I might add that this seems to be one of the most difficult functions for the liver to carry out, because injury to the organism can be brought about more easily by the feeding of a diet high in proteins to an animal with decreased hepatic function than any way with which I am familiar.

I might emphasize this. If the hepatic tissue in an animal is reduced to a very small amount, which can be done by three different methods, and if that animal is maintained on a diet of syrup and milk, it will remain apparently in a normal condition. If that same animal is fed for two or three days nothing but a meat diet, the animal becomes ill, and if the meat diet is continued for a few more days frequently it dies. Apparently, this particular function is difficult for the liver to carry out. How or why is not known.

The liver has another function which, unfortunately, is apparently not of as much significance or importance in the human being as it is in almost all other species of animals. The reason I say unfortunately is because this particular function can be estimated very well, and is the most easily injured of any of the functions of the liver which so far have been studied. This function is the destruction of uric acid. In the human being the end product of metabolism of purines is mainly uric acid, which is excreted in the urine as such. In most of the other species of animals uric acid is burned down to another substance to be secreted in the urine. The liver is necessary for this second stage in those animals. If that were wholly true in the human being, I am sure a fairly good metabolism test of hepatic function could be developed because it is the best test found for the function of the liver in the dog.

The liver also has something to do with metabolism of fat, although very little is known about this. An indication that the liver is of importance in metabolism of fat is furnished by the fact that the glycogen content of the liver and the fat content bear a reciprocal relationship to each other. If an animal is fed heavily on carbohydrates, the glycogen content of the liver will be increased. If the animal is made to fast, as the glycogen disappears from the hepatic cells small globules of fat appear. This is particularly marked in those animals that hibernate. It is possible in a hibernating animal to find a liver with so much fat that a section of the organ looks like omentum. This is of physiologic significance, and the condition is different from the so-called fatty liver that is found by the pathologists.

MINOR FUNCTIONS

As I stated before, the liver, of course, has many minor functions. For instance, it has to do with the coagulation of the blood. In an animal that does not possess a liver a normal clot may form for hours after removal of the organ and then fail to do so. As yet it has not been determined definitely whether this is due to lack of the formation of fibrinogen, or whether it is due to some other cause. It has been considered that the element in the blood, fibrinogen, necessary for the formation of the clot, is made in the liver. I am not so sure that this is true, but it can be stated positively that the liver, either directly or indirectly, has something to do with the normal process of coagulation of the blood.

The liver is also of importance in certain phases of mineral metabolism. I have mentioned the fact that the stellate cell is one of the cells of the body which stores iron. This iron, presumably, is the residue that has been saved from the broken down hemoglobin. This is not certain but it would seem true because, under conditions in which large amounts of hemoglobin have been made free in the circulation, the iron content of these cells is increased.

The liver is also responsible in some manner, as yet obscure, for the water balance in the body. If 70 or 80 per cent of the liver is removed from a normal dog as nearly as can be told the animal has not been injured. The amount of liver which is left is sufficient to maintain the various functions of the organism. However, now and then a serious thing happens; the animal actually will drown because of the large amount of water, which accumulates in the thorax. It has not been possible as yet to explain why this occurs, but the condition can be produced. Although it cannot be induced quite as certainly as many of the other hepatic conditions, it will appear in a number of instances under properly controlled conditions. In some way, therefore, the removal of this large amount of liver has brought on a condition whereby the fluid will not stay in the vascular system and accumulates in the serious cavities.

One of my associates also found out another thing which emphasized the fact that the liver has something to do with the control of fluid in the body. It has been known for several years that if the common bile-duct of a dog is obstructed he will die rather readily unless he is kept under certain definite dietetic control which does not include the giving of meat. Dr. Bollman found that when one of these animals the common bile-duct of which has been obstructed for several weeks, is given meat, ascites will quickly develop. If the meat is withdrawn and he is given again a carbohydrate diet, the ascites will disappear. This suggests that in some way the liver is concerned with a change in the control of the body fluid; how is not known.

APPLICATION IN CLINICAL MEDICINE

I do not know whether with these few facts that I have given with regard to the physiology of the liver, it is possible to make many statements concerning how they can be applied in clinical medi-

cine. The thing I think of most importance to remember is the one that I emphasized at first; namely, the restorative power of the liver, and that this restorative power depends on certain definite factors. First, it depends on an intact portal circulation. The liver is the only organ of the body that has two sources of blood supply: one arterial, and the other venous. The venous channel that leads to the liver drains an area of the body in which a large amount of the newly formed substances, or at least substances which easily can enter the body, are found. This makes the physiologic conditions of this organ slightly different from those of other organs. If the portal blood is shunted away from the liver it is possible to remove as much hepatic tissue as may be desired; the remaining portion is not restored, or restoration occurs only to a slight degree. By this means, it has been found possible to reduce hepatic tissue and keep it reduced, and this in turn has made it possible to make studies of physiologic processes with hepatic function decreased. We also can decrease function of the liver by obstructing the common bile-duct and then removing various amounts of the organ. The restorative power of the liver is injured by biliary obstruction. This is probably a point to remember in relation to your cases in which the common bile-duct has been long obstructed. That is, if an hepatic injury occurs in the patient with biliary obstruction you will not get regeneration of the liver to any great extent as compared with that in the patient with a patent common bile-duct.

I wish to emphasize, second, the important function of the liver in connection with metabolism of carbohydrates, that of controlling the blood sugar. This is a vital function and, to a certain extent, we can protect the liver by proper administration of glucose.

Third, there is the important function of the liver in metabolism of protein. The body can be protected by diminishing the amount of work the liver has to do in this regard.

Finally, I wish to leave with you the idea that the organ has many more functions, concerning which little is known at the present time, but concerning which there are definite indications.

An animal with greatly reduced hepatic tissue, in good condition and seemingly normal, if maintained under proper dietetic control, is not normal. He makes a poor operative risk. His wounds will not heal. Something is lacking, we do not know what. That makes me hazard the guess that to some extent the thing we call an operative risk surgically, or the thing that makes us feel the patient is not going to do well following an infection or other disease condition depends on some of these as yet subtle and unknown functions of the liver. In the future, I conjecture when knowledge concerning the liver is greater, when the organ can be protected, and when, in some way, substitutions can be made for the various functions, it will be possible to tide over many patients under conditions in which at the present time we are not able to tide them over.

Clinical Application of Studies in Obstructive Jaundice*

By WALTMAN WALTERS, M. D.
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I have been asked to present the clinical side of a series of studies on hepatic function carried on at the Mayo Clinic during the last few years. Time permits reference to only a part of such studies and I have chosen to discuss briefly the application of some of the clinical and experimental data in the treatment of patients with obstructive jaundice. Briefly summarized, they consist of prevention of postoperative hemorrhage by the intravenous injections of calcium chloride, determination of the propitious time for operation based on study of the coagulation time of the blood, and measurement of the amount of bile in the blood. A blood coagulation time of nine minutes or less, and a stationary amount of bile pigment in the blood serum, following an increasing or, better, a decreasing amount, are essential before operation on a patient whose general condition is as satisfactory as the average, and whose renal function is within normal limits.

Clinical and experimental studies of hepatic function by Rowntree, Mann and their co-workers, seem to indicate that the level of bile pigment in the blood stream in the presence of obstructive jaundice forms a good index of hepatic function and that glucose administered intravenously in a 10 to 20 per cent solution is of great value to the deeply jaundiced patient.

*Read before the 87th Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, September 14, 1928.

In cases of biliary obstruction, as in those of gastro-intestinal and urinary obstruction, dehydration is often the principal cause of toxemia and the easiest to prevent. Clinical and experimental evidence is at hand which substantiates this statement. Present-day knowledge of this proposition has developed from the understanding of changes in the chemistry of the blood of patients with these obstructing lesions, characterized by a drop in the chlorides in the blood and a rise in urea and alkalosis. Attention is directed to the fact that these changes in the blood are indicative of toxemia which has developed from dehydration caused by vomiting, discharge of fluids through a fistula, elimination of fluid into the intestinal tract or by inadequate fluid intake. Intake of fluids of 3,000 c.c. daily is usually adequate in all cases, but excess of intake over output should be sought in every case.

The value of the prevention of postoperative hemorrhage, the determination of the propitious time for surgical intervention, the use of glucose, and the control of the toxemia of dehydration by maintaining a positive fluid balance, or better still by preventing dehydration, is reflected in the statement recently made by Moynihan: "Operation is now advised on all patients with obstructive jaundice, provided they can be sufficiently prepared." In a group of seventy-eight cases of obstructive jaundice of various degrees in which I have operated during the last four years, serious intra-abdominal hemorrhage occurred in but two instances, both following reconstruction operations for stricture of the common and hepatic bile-duct. Both patients were deeply jaundiced with serum bilirubins of 12 and 10.

The lowered risk of operation on jaundiced patients has made possible the acceptance for operation of many who previously might have been denied operation because of the risk. This applies particularly to the group of patients with obstructive jaundice without pain; operation was not advised because malignancy was believed to be the cause of the obstructive lesion and the risk of exploration was high. In many such patients, however, stones in the common or hepatic duct or an inflammatory lesion and not a malignant lesion has been found to cause the painless jaundice. In from 8 to 10 per cent of cases of stones in the common and hepatic ducts producing jaundice, a history of biliary colic is not obtained. It is well to emphasize the fact that painless jaundice is not a diagnostic criterion of malignant lesion in all cases.

Should painless jaundice be due to a pancreatic tumor obstructing the common bile duct, relief of the intolerable itching by the establishment of a communication between the distended biliary tract and the intestine, usually by joining an opening made in the gallbladder to one made in the stomach or duodenum, is worth the risk of the operation. If the lesion is inflammatory the patient remains well, while if malignant although eventually succumbing to the effects of malignancy, in the interim there is freedom from jaundice and itching.

In cases in which operation has been performed previously and obstructive jaundice appears, the cause of the obstruction is usually due to a stone or a stricture. Should stricture exist, the duct above the stricture can be attached to an opening in the duodenum. Good results which will be permanent can be expected in those cases in which a sufficient amount of the duct remains so that an accurate union of mucous membrane to mucous membrane can be effected between it and an opening made usually in the duodenum.

Less frequently jaundice is the result of infection existing in the bile radicals of the liver, sometimes extending into the extrahepatic biliary passages. In some cases in which the lesion was thought to have been of this type, at abdominal exploration a stone was found in the duct or a tumor in the head of the pancreas was identified, and biliary obstruction was relieved by anastomosis between the biliary and intestinal tracts. It has been my experience that even in cases of jaundice from cholangitis, operation has not been harmful; indeed drainage of the common bile-duct has seemed to shorten the period of jaundice and the patient's general condition has improved.

OBSTRUCTIVE JAUNDICE

The results of treatment of obstructive jaundice have been satisfactory as measured by relief of symptoms over a long period, for example, the results in a group of seventy-eight cases in which I operated. In a group of fifty cases in which stones were removed from the common and hepatic ducts, forty-four patients were relieved of symptoms and have been well since operation. Two patients have been relieved of pain and fever but have had transient jaundice on one or two occasions. Four patients died. In seventeen of the

cases more than two years have elapsed since operation, in nine more than one year, and in twenty-one less than one year.

Sixteen patients were operated on for stricture of the common bile-duct, thirteen of whom are living. Six patients in whom sufficient duct remained to permit an accurate anastomosis to the duodenum, have been perfectly well and entirely free of symptoms since operation. A period of two years and three months has elapsed since operation in one of the cases.

Twelve patients were operated on for tumor in the head of the pancreas; anastomosis being made between the distended biliary tract and the stomach, and six are living free of jaundice and itching and are working. A period of more than two years has elapsed in one case.

Good results are usual, but a few unusual complications have arisen in some of the cases which, because of the unusual nature and the fact that the recognition and compensation led to recovery, seem worthy of detailed discussion.

PREOPERATIVE COMPLICATIONS

It may be accepted as an axiom that when a jaundiced patient is operated on bile drainage must be adequately established. This is done through the regular biliary channels after a stone or stones have been removed from the duct, or through an anastomosis made between a distended portion of the biliary tract and the intestine for the relief of a stricture of the common bile-duct or a tumor in the head of the pancreas. In cases in which stones in the ducts are the cause of the biliary obstruction, removal is usually followed by uneventful convalescence, provided the ducts have been entirely cleared of the stones. In cases in which the stones have not been entirely removed jaundice deepens, and uncontrollable bleeding occurs. In two recent cases, when the ducts appeared to be cleared of stones, the large caliber of the duct permitted the introduction of the finger and a stone was found remaining in the ampulla. On such exploration in another case it was noted that the sphincter of Oddi was relaxed so that the tip of an exploring finger could be inserted through it into the lumen of the duodenum. Subsequent to operation, the discharge of from 800 to 1500 c.c. of fluid daily through the catheter which had been inserted into the common bile-duct led me to believe that the increased amount of the discharge was due to a reflux of duodenal secretion into the common bile-duct through the dilated papilla and sphincter. Drainage ceased on the tenth day, when the catheter was removed from the duct. Here again, the important factor was the prevention of dehydration. Subcutaneous and intravenous injections of physiologic solution of sodium chloride were given to compensate for the fluid lost.

Jacobson, in 1914, and later, Eliot, in 1918, reported cases which had been under their personal observation, and reviewed the literature on stricture of the common bile-duct, giving a summary of their review and drawing attention to the various methods used in the repair of stricture and the results obtained. Judd and Burden, in 1925 reported a group of forty-eight cases and stated that the method of performing hepaticoduodenostomy described by W. J. Mayo in 1905 has proved the most practical, the most widely applicable and the most successful procedure for establishing the natural course of the flow of bile. In a series of sixteen cases in which I have operated for strictures of the common and hepatic bile-ducts in the last four years, I have used this type of hepaticoduodenostomy in seven cases with good results. All the patients are living and six have been perfectly well. In five of the seven cases the postoperative course was uneventful. In two cases complications arose which I wish to discuss in some detail.

With anastomosis to the duodenum of the portion of the duct proximal to the stricture, the possibility of a duodenal fistula from leakage from the anastomosis becomes evident. This occurred in a man aged sixty-four on the eighth day following operation. Changes in the blood consisted of a decrease in the chlorides and a rise in urea. Control of toxemia and restoration of the blood to normal were secured by intravenous injection of a solution of sodium chloride while the fistulous tract was kept dry with an electric suction pump. The patient made an excellent recovery; the fistula was healed on the seventh day following its appearance and the anastomosis between the common bile-duct and the duodenum transmitted bile efficiently, thus relieving the jaundice. I had an opportunity to examine the patient eighteen months following his dismissal at which time his general condition was excellent and he had not had further symptoms. In a letter from him in August, 1928, he stated that he is still perfectly well without the slightest evidence of biliary obstruc-

tion. Two years and three months have elapsed since the operation.

In one case in which hepaticoduodenostomy was performed, there was an accumulation of bile between the liver and the diaphragm, depressing the latter and producing a group of symptoms characterized by an exceedingly rapid pulse rate, low blood pressure, rapid rate of respiration, cold damp skin and semiconsciousness. The abdominal wound was opened in the patient's room to permit the exit of bile from the area between the dome of the liver and the diaphragm. Immediate improvement occurred and convalescence and complete recovery were not complicated further. Experimentally, Bollman and I were able to reproduce these changes by depressing the liver in animals. The change in the position of the patient's liver interfered with circulation from it to the vena cava sufficiently to cause changes in the pulse rate and blood pressure. Operation was performed in August, 1927, and the patient has been well since. A letter dated August 25, 1928, stated that she is well and without evidence of disease of the biliary tract or of obstruction.

When a tumor in the head of the pancreas is obstructing the common bile-duct or when a stricture exists in the common bile-duct distal to the entrance of the cystic duct, and the gallbladder has not been removed, the attachment of the gallbladder to the stomach or intestine offers an easy means of restoring continuity between the biliary and intestinal tracts. In such cases, as well as in those in which a large anastomosis has been made between the distended bile-ducts for the relief of strictures, the possibility of infection occurring with exacerbation of the symptoms of cholangitis has been described. Wangensteen has reported such a case and studied other reports in the literature of this type of anastomosis. In general it may be said that when such exacerbations of cholangitis take place, there is presumptive evidence that a decrease in the size of the anastomotic opening has taken place, preventing the free flow of the bile into the intestine. However, it is also probable that residual cholangitis may exist in the liver with occasional renewal of jaundice or even fever and jaundice even after complete relief of the stricture. Illustrative of this is a case in which an anastomosis was made between the distended common bile-duct and the duodenum in September, 1926. Following this the patient was perfectly well for two months and then symptoms of cholangitis developed which progressed to the point of resembling hepatic abscess. Exploration was carried out with this in mind but abscess was not found. During this time there was considerable increase in size of the already hypertrophied liver, enlargement of the spleen and the appearance of ascites. After fever had disappeared the ascitic fluid was removed by one of the mercurial diuretics, following which the patient was comparatively comfortable. In spite of the cholangitis she had been free of pain, stools were normal in color, and bile was always obtained in the duodenal contents.

TRANSPLANTATION OF AN ESTABLISHED EXTERNAL BILIARY FISTULA

When stricture exists throughout the entire length of the common and hepatic ducts the tapping of the intrahepatic portion of the hepatic duct and establishing an external biliary fistula, which later can be coned out and transplanted into the duodenum, is a method of treatment first successfully used by Williams in 1914. Five other successful cases have been reported by Lahey, Masson, St. John and Lilienthal. One case of this kind came under my care in December, 1927, at which time I established an external biliary fistulous tract and in February, 1928, I transplanted the coned-out fistulous tract into the duodenum. Since then the patient has been free of jaundice, the wound is healed and the stools are normal in color. She has gained in weight and feels very well.

SUMMARY

As a result of the application of the data obtained from clinical and experimental studies of obstructive jaundice, the risk of operation of patients with obstructive jaundice has been greatly decreased. This consists of prevention of postoperative hemorrhage by intravenous injections of calcium chloride, and determination of the propitious time for operation by a study of the coagulation time of the blood and the measurement of the amount of bile pigment in the blood stream. A coagulation time of the blood of nine minutes or less, a stationary or, better, a decreasing amount of bile pigment in the blood serum following an increase, and renal function which is within normal limits, are essential before surgical procedures are instituted. Clinical and experimental studies in obstructive jaundice seem to indicate that the level of bile pigment in the blood is a good index of the function of the liver and that a substance of great value

to deeply jaundiced patients is glucose intravenously administered. In cases of obstructive jaundice, as in those with obstructive lesions in other parts of the body, dehydration is often the principal cause of the toxemia and an excess of intake over output should be sought in every case.

In a group of seventy-eight cases in which operation was performed for obstructive lesions of the common and hepatic bile ducts, consisting of stones, strictures and tumors at the head of the pancreas, the risk of operation has been 10 per cent. Necropsy was performed in all fatal cases. In two cases was hemorrhage the cause of death. The lowered risk of operation on jaundiced patients has enabled the acceptance for operation of patients who heretofore have been denied operation. This applies particularly to a group of patients with obstructive jaundice and without pain. Formerly, in the belief that the obstruction was due to a malignant growth, operation was not advised. In many such cases, however, the cause of the obstructive jaundice has been found to be a stone or stones or an inflammatory lesion, and not a malignant growth.

The results of treatment of obstructive jaundice and its complications have been excellent. In a group of fifty cases in which stones were removed from the common and hepatic ducts, forty-four patients were relieved of symptoms and have been well since operation. Two patients have been relieved of pain and fever but have had transient jaundice on one or two occasions. There were four deaths in the series. In sixteen cases more than two years have elapsed since operation, in nine more than one year, and in twenty-one, less than one year.

Sixteen patients were operated on for stricture of the common bile-duct, thirteen of whom are living. But two of these three deaths occurred in the hospital. In the other the patient a woman of 64 died at home twenty months following operation from unknown cause. Six of the patients in whom sufficient duct remained to permit an accurate anastomosis to the duodenum, have been perfectly well and entirely free of symptoms since operation. A period of two years and three months has elapsed since operation in one of these cases.

Twelve patients were operated on for tumor in the head of the pancreas, an anastomosis being made between the distended biliary tract and the stomach; six are living, and a period of more than two years has elapsed in one.

These results are mentioned as an introduction to the description of some of the unusual postoperative complications occurring following operations for strictures of the ducts. The complications were duodenal fistula in one case and the accumulation of bile around the liver in another. Both patients recovered and have been perfectly well since operation. More than two years have elapsed in the former case since operation and more than one year in the latter. In another case dilatation of the sphincter of Oddi, noted on palpation of the duct by the finger following the removal of stones, permitted an almost certain diagnosis of reflux of duodenal secretion into the common bile-duct. From 800 c.c. to 1500 c.c. of fluid daily was discharged from the catheter which was inserted into the common bile-duct; the discharge ceased on removal of the tube.

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DISCUSSION

DR. J. L. YATES (Milwaukee): An understanding of the divers hepatic functions and an estimation of their existent efficacy provide clinicians with information which can be employed with great advantage to many patients suffering from a wide range of diseases. We are fortunate, indeed, in having Dr. Mann, whose contributions to the knowledge of liver functions have been outstanding, and Dr. Walters, whose application of this knowledge to clinical problems has been of signal value, to present these aspects so clearly and authoritatively.

It were futile even if time permitted to attempt discussion of Dr. Mann's presentation other than to express appreciation of its scope and excellence. An example of the value of the information he has given may be found in the few individuals who are subject to spontaneous thrombosis.

The liver forms substances, antithrombin or heparin, that impede coagulation and help to maintain the fluid state of intravascular blood. When they are not elaborated in adequate quantity or suitable quality, coagulation of blood is possible wherever statis occurs, clotting time of blood falls below the lower limits of normal, and thrombosis becomes a serious menace, particularly if it occurs in cerebral vessels. In addition to finding the normal bleeding time (3 to 7 minutes) reduced to a minute or two, the liver function, as revealed by retention of phenoltetraiodophthalein, is discovered to be impaired. Suitable measures, including wholesome methods of living, avoidance of over-fatigue and constipation and an excess intake of carbohydrates and fluids, can lead possibly to avoidance, certainly to postponement of a catastrophe.

Another example of the value of information may be noted in the many individuals who are subject to constipation and in those affected with paralytic ileus.

The liver forms not only bile acid salts, which delivered in the bile help to maintain the tone and assist in the stimulation of the musculature of stomach and intestines, but also probably elaborates other substances which are delivered through the blood and similarly affect these muscles. Hence the need to safeguard the liver in health but more particularly from the effects of acute intoxications of infections, those resulting from tissue degenerations in burns and eclampsia and those incidental to poisoning, such as phosphorus, narcotics and anesthetics.

Dr. Walters was asked to discuss obstructive jaundice and has responded admirably. All will agree with him that the obligations of surgeons are to strive constantly to find ever more effective means to render earlier operative assistance to those whose illness is either incipient or advanced in order that they may, without undue danger, be provided with every opportunity for prompt and complete recovery.

There is no reason to dispute the soundness of the views Dr. Walters has expressed. However, there are some grounds for a belief that they may be supplemented.

Graham has shown that it is possible through the use of phenoltetraiodophthalein to differentiate the obstruction due to stone from that due to a pancreatic neoplasm. This is worth while. Not all patients suffering from cancer of the pancreas should be subjected to operation, but all those having benign obstructions, particularly the 10% with painless jaundice, should be given operative assistance if they can be prepared to tolerate the stresses thereby imposed.

Jaundice is a toxemia in which the most noxious agents, the bile acid salts, injure every cell in the body, but are particularly harmful to those of the circulatory unit, nerves, myocardium, blood vessels, blood-forming structures and blood in currency, to the liver and to the kidneys.

Determination of bleeding time is preferable to estimation of coagulation time. It is simpler, requires no apparatus and provides more dependable information as it foretells what will actually occur in a wound, not in vitro.

Estimation of hepatic functional capacity by determining the proportion of retained phenoltetraiodophthalein is more accurate than by measuring the bilirubinemia. Both are desirable.

Estimations of the competence of the myocardium and of the blood-forming structures and determination of the characteristics of the blood often establish the need and indicate the means to provide a wider margin of safety. Determination of renal function is indicated for the same reasons.

The therapeutic objectives are:

(1) Restoration of hepatic, myocardial, hematopoietic and renal functions through the elimination of toxemia consequent upon bile salts and the products of tissue degeneration and bacteria.

(2) Relief of dehydration and alkalosis resulting from hypochloridemia and deficits in intracellular chlorids which prevent cells from utilizing water even though it be present in excess.

(3) Prevention of postoperative hemorrhage.

(4) Prevention of postoperative paralytic ileus.

(5) Prevention of postoperative tachycardia.

The means, largely employed in preparation for operation, are:

(1) Rest, fresh air and sunshine.

(2) High intake of fluids by mouth, especially fruit juices.

(3) Five to ten per cent glucose solutions intravenously.

(4) Three per cent salt solution intravenously.

(5) Calcium chlorid intravenously or calcium lactate by mouth.

(6) Multiple transfusions of blood unmodified by the addition of anti-coagulants.

(7) Digitalis when indicated.

Judgment as to when it becomes safe to operate is based in part upon the following criteria:

(1) Myocardial, hematopoietic, renal and hepatic functions so restored as to indicate viability.

(2) Bleeding time from three to five minutes.

(3) Blood chlorids at the upper limits of normal.

(4) Bilirubinemia minimized.

Operations upon the bile tract have been so thoroughly standardized that little may be expected in the way of technical improvement alone. The injurious effects of anesthetics and narcotics upon heart muscle, liver and kidney, particularly in higher concentrations, are recog-

nized, and means will be found to restrict them further than is now possible. Such progress, together with the development of more reliable indications for operations in one or more stages and more prompt intervention, will enhance the value of surgical treatment. This will be accompanied not only by a curtailment in postoperative casualties and a diminution in immediate and permanent disabilities but also by extension of operation to a larger number of seriously sick patients than is thought to be possible at present.

Postoperative care, in some ways quite as significant as preoperative preparation, is but the application of the measures employed in preparation and, whenever possible, before their utilization is indicated.

DR. H. H. REESE(Madison): I would appreciate very much if Dr. Mann could tell us a little bit about the regulation of the mechanism of the liver, assuming that the liver in itself regulates the metabolism, especially the mineral and the water metabolism. The liver is regulated more or less by the splenic region. We have learned from our previous physiological studies that our metabolisms, especially the mineral and water, are regulated from the subthalamic region. What is the relationship between the liver region and the subthalamic mechanism?

Furthermore, I would like very much to know whether some research work has been done in copper storage in the stellate cells, especially after this wonderful piece of work done by Professor Hart in Madison. I am interested in the storage of copper. It is not the iron metabolism which acts upon our hematopoietic system. It must be, according to Dr. Hart's study, the copper also.

DR. MANN: I am very sorry that I cannot answer the questions asked. We have animals in the laboratory at the present time. I recall one that has gone about two years. We destroyed all members of the liver. So far as we know it has gone along very normally. We studied its basal metabolism and it is normal. Others have not gone such a length of time and they have been normal in appearance. I know of no study done on copper. Malvis' studies had to do with copper in the hepatic cell and not in the stellate cell.

I wish to thank the members of the Society for allowing us to tell them something about their work. (Applause.)

Spinal Anesthesia; Volume Control Technic

By RICHARD B. STOUT, M. D.
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Control of the upward extension of anesthesia is a highly desirable feature of any technic for induction of spinal anesthesia. A method has been devised, which within practical limits, enables the operator to produce anesthesia to any desired level on the body. This method depends upon an understanding of the physical principles governing diffusion of novocain in the spinal canal and provides an accurate control of the several factors governing this diffusion.

The most important factors in volume control technic of spinal anesthesia are: the aspiration of accurately measured volumes of spinal fluid used as a solvent for graded doses of novocain, and the re-injection of the spinal fluid-novocain solution at a constant measured rate, without loss of fluid during the manipulation. This is facilitated by the use of small calibre (22 gauge) spinal puncture needles which minimize fluid loss during manipulations and avoid post-puncture leakage and cord trauma. Of equal importance is the properly timed prophylactic administration of ephedrine in amounts directly proportional to the height of anesthesia to be produced, varied also according to the size of the patient and his vascular condition.

A careful record should be kept of all factors varied under control, the extent of the anesthesia produced and its duration, the patient's general condition and any medication during the operation, with graphic blood pressure and pulse records. These records must be studied and compared to obtain a full realization of the effect of variation of any given factor upon the resultant level of anesthesia and the condition of the patient during operation.

Preparation of the patient for operation under spinal anesthesia includes at least 24 hours of rest in bed, adequate hydration, and the usual laboratory and physical examinations. The following standardized routine orders are carried out in the preparation of all patients for major operations:

1.—Fluids should be forced to at least 3500 cc. during 24 hours preceeding operation.
2.—*Thorough* cleansing enema on evening before operation.
3.—Ten grains of sodium barbital by mouth 1½ hours pre-op.
4.—Pantopon gr. 1/3 and scopolamine gr. 1/150 by hypo one hour pre-op.
5.—Stop up patient's ears and cover eyes—keep room quiet.

This technic will produce anesthesia to the indicated levels in the average 150 lb. adult. Volumes, novocain and ephedrine dosage must be increased proportionately for large individuals and decreased for small ones. Ephedrine dosage is varied from that prescribed in the table in cases of hypotension and hypertension. (For discussion see

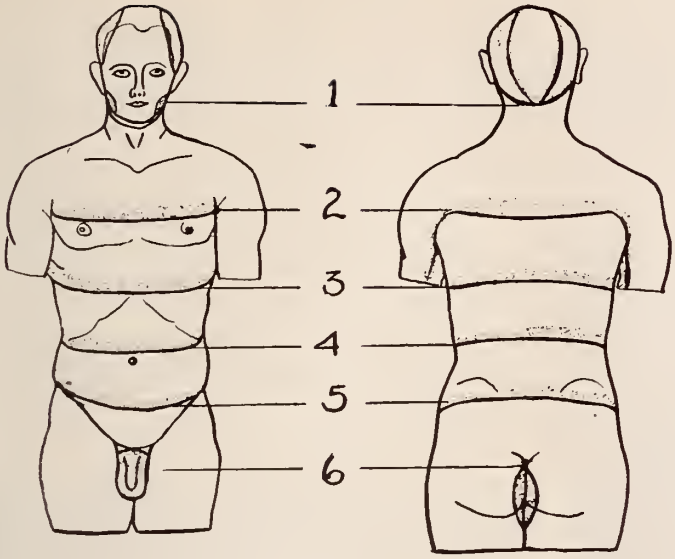

Fig. 1

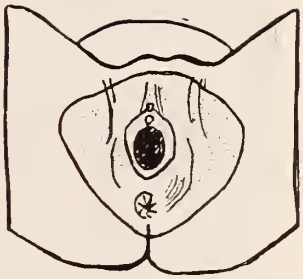

Fig. 2

Level of Anesthesia See Fig. 1	Novocain Diffused to —	Volume of Novocain Spinal fluid Solution	Novocain Dosage in Mgm.	Average Length of Anesthesia Hours	Average Sp. Gr. of Solution Injected	Glucose % Added	Rate of Injection in Seconds	Position of Patient	Ephedrin Dosage in mgm.
1	2nd Cervical	3.5 cc	200 300	1 1½	1.015 1.020	—	17	Hor.	95.
2	2nd Dorsal	3.0 cc	200 300	1¼ 1¾	1.015 1.025	—	15	Hor.	80.
3	6th Dorsal	2.5 cc	150 300	1¼ 1¾	1.015 1.030	—	12	Hor.	65.
4	9th Dorsal	2.0 cc	150 200	1½ 1¾	1.020 1.025	—	10	Hor.	50.
5	12th Dorsal	1.0 cc	100 200	1¼ 2	1.025 1.045	—	5	10° Fowler's	30.
6	4th Sacral	0.8 cc	100 200	1½ 3¼	1.050 1.070	0.2 cc	10	10° Fowler's	0.

Fig. 3 – Table of Technic.

ref.) Any severe fall in blood pressure within five or ten minutes after injection of the novocain-spinal fluid solution means that an insufficient prophylactic dose of ephedrine was given or that the intraspinal injection was made too soon after the ephedrine was given. If the spinal injection is made five minutes or more after a *sufficient* dose of ephedrine has been injected *intramuscularly*, this fall will not occur.

TECHNIC

1. Record blood pressure on graphic chart.
2. Prepare surgical field—cover with sterile towel—strap towel down with adhesive straps.
3. With the patient in the right lateral position, back bowed out, knees up, neck flexed, and steadied by an assistant, the back and upper buttock is thoroughly scrubbed with ether and alcohol, dried and painted with 3 per cent tincture of iodine.
4. Inject ephedrine *intra-muscularly* in buttock. (For dosage see table). Massage site of injection thoroughly. Ephedrine is not given when perineal anesthesia only is desired.
5. After palpation of a convenient lumbar interspace (usually the second or third) produce local ischemia by firm pressure of the thumbnail for 10-20 seconds. Then quickly introduce a 22 gauge spinal puncture needle through blanched area which has been rendered temporarily anesthetic by pressure. Con-

Fig. 4. *Injecting spinal fluid-novocain solution. Table is tilted to 10° Fowler's position for anesthesia of perineum or legs. (See table of technic.)*

tinue introduction of needle slowly through interspinous ligament into dural sac, which is recognized by a slight snap and subsequent lack of resistance. Novocain skin infiltration may be used if so desired.

6. Remove stylet of spinal needle. When fluid is seen welling up into hub of needle, quickly attach syringe without loss of fluid and slowly aspirate the required volume of fluid. (See table.) Detach syringe and quickly replace stylet.
7. Attach another needle to syringe and transfer spinal fluid of ampule of novocain crystals (for dosage see table). Dissolve crystals by barbotage, aspirate solution into syringe, detach needle and express any air bubbles. (0.2 cc. of 50 per cent glucose* may be aspirated into syringe and mixed with the spinal fluid-novocaine solution at this time when anesthesia of the perineum only is desired.)
8. Remove stylet from spinal needle, quickly attach syringe and inject solution at a constant rate without barbotage. *Injection should be accurately timed.* (See table for rate of injection.)
9. Spinal needle is then withdrawn, still attached to syringe, and with a sterile sponge held over the site of puncture, the patient is placed in position for operation.
10. Blood pressure readings are taken and recorded while draping the operative field and the patient is told that he may expect a sensation of numbness to follow shortly.
11. The level of anesthesia is determined by pinprick five minutes after injection and recorded. Operation is then allowed to proceed. After ten minutes the level of the table may be changed (Fowler's or Trendelenburg) to suit the convenience of the surgeon. No change in level of anesthesia results, which indicates fixation of the novocain in the tissues by that time. The level of anesthesia may be raised if the Trendelenburg position is taken sooner.

Fig. 5. *Taking blood pressure during operation.*

Fig. 6. *Appendectomy.*

A competent anesthetist should be with the patient throughout the operation and attend to his mental and physical comfort. Blood pressure and pulse rate are recorded at frequent intervals. Pantopon or morphine may be administered during the operation if the pre-operative sedation is deemed insufficient.

Ephedrine and adrenalin in ampules should be kept ready for hypodermic injection in case any

*Ampules containing 1 cc. of 50 per cent glucose may be obtained from the Swan-Meyer Co., Indianapolis, Indiana.

considerable fall in blood pressure should occur. Sodium barbital in ampules for intravenous injection should always be ready to combat the possible complication of an acute novocain intoxication.

Luer-Lok 2 cc and 3 cc syringes and B-D Erusto 22 gauge spinal puncture needles with 45° bevel point have been found most satisfactory. They may be cleaned by rinsing in distilled water, wrapped in a towel with gauze sponges, gloves and powder, a file and a lifter for the ampules, and autoclaved for twenty minutes at twenty pounds pressure. Several such sterile outfits are always kept on hand. Ampules of novocain crystals, 50 per cent glucose, ephedrine and adrenalin are kept in small covered cups immersed in 70 per cent alcohol till used.

Fig. 7. *Anesthetist's table with cups for ampules and sterile outfit, opened.*

Indications for spinal anesthesia, a discussion of its many benefits and a consideration of the theoretical principles involved in this technic have been recorded in a previous communication. (1)

Volume control technic for induction of spinal anesthesia has been used in about 300 cases at the Methodist Hospital, and has proved unusually satisfactory and reliable. It is hoped that the publication of this technic may be of some interest to those already using spinal anesthesia as well as those only contemplating its use.

I wish to thank Drs. R. H. Jackson, J. A. Jackson, A. S. Jackson and their associates for their encouragement and cooperation in the application of this technic to general surgery. Also I wish to thank Drs. G. H. Ewell and C. S. Harper for their cooperation in adapting the technic of perineal anesthesia to urologic, gynecologic and obstetric surgery.

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History of Medicine in Brown County*

By T. J. OLIVER, M. D.
Green Bay

This is a very humble effort to sketch crudely the history of Brown County and endeavor to link up with it the practice of medicine and those engaged in that profession.

Brown County, with the center of influence and population located for five miles from the mouth of the Fox River, once embraced half the area of what is now Wisconsin. Twenty-two counties have been carved from Brown, which, when erected by Proclamation of Lewis Case, Governor of Michigan Territory, on October 26, 1818, had for its boundaries: north, the County of Michilimackinac; east, that county and the northward extension of the line between Indiana and Illinois; west, a line drawn due north from the Illinois boundary through the middle of the portage between the Fox and Wisconsin rivers; south, the Illinois line.

The territory which now comprises Brown County has been subject to many jurisdictions, but always, the land line between DePere and Green Bay, formed its center and capital. It was an important post under the old French regime from 1669 to 1759. It then came under British rule and remained British until after the war of 1812.

The area in the original County of Brown was afterwards added to the Territory of Ohio, then was transferred to Indiana, with the county seat at Old Vincennes; later, it became a part of Illinois, and when Illinois attained statehood, in 1805, it was handed over to Michigan which was set off as a separate territory on January 11, 1805.

In 1834, Milwaukee County was set off from Brown; in 1836, the entire counties of Sheboygan, Fon du Lac, Manitowoc, and Marquette, likewise the townships of Washington, Dodge and Portage, were taken from Brown. Between 1840 and 1850, Winnebago and Calumet were erected from a portion of Brown and Marquette; Portage and Manitowoc enlarged from the same source. In 1851, Oconto County was pared off and in the

*Presented before the Green Bay Academy of Medicine, January, 1929.

same year, Door and Kewaunee Counties were also carved out of Brown. Later in the same year, Outagamie was erected from the remaining area of Brown which was, by this time, reduced to its present size.

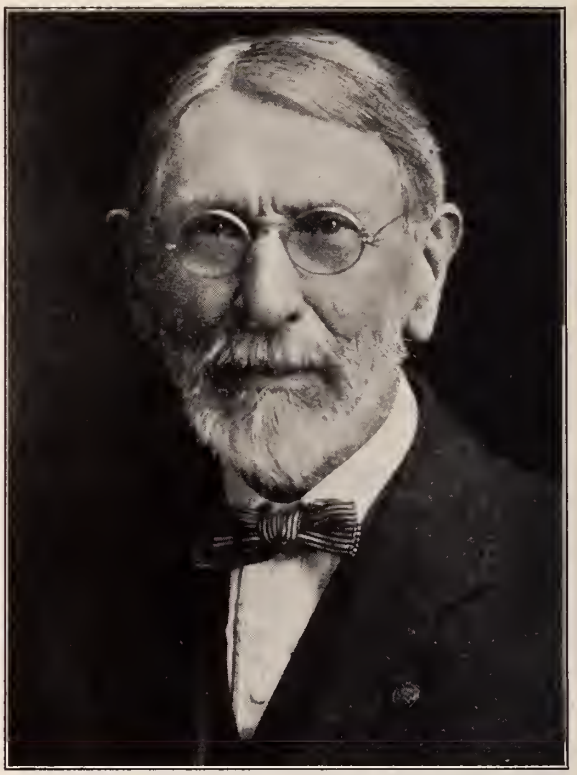
The county received its name from Major-General Jacob Brown of the U. S. Army, a leader in the war of 1812.

The fur trade was for two centuries the absorbing commercial interest of this region. It began with the coming of the first Frenchman in 1634 and continued until the American Fur Company wound up its affairs in Green Bay in 1844. Then the lumber industry took hold of the people and the great forests of pine, birch, maple and hemlock, called for the erection of mills to utilize this supply of lumber. This formed the largest interest in Brown County up to 1875 when practically no timber remained. The necessary clearing away of the forests and the consumption of waste timber in the charcoal kilns during the period when iron furnaces were in full blast in De-Pere and in Green Bay, furnished another avenue for labor and source of profit until agriculture and dairying inaugurated a new industrial era. De-Pere and Little Rapids, because of water-power, developed manufactures, and Green Bay has also become a manufacturing center.

Hendrich Hudson sailed, for the first time, the great river which bears his name, in 1609. The Mayflower made her initial voyage in 1620. Jean Nicolet, an adventurous Norman, made the long trip from Quebec to the Green Bay locality in 1634.

Three hundred years ago, no white foot had stepped on the ground of what became Brown County, and, in a medical way, the Indian Medicine Man, with his fumigation, incantation and ceremonial dance, endeavored to drive out the evil spirits causing disease, and, if the natural recuperative powers of Nature failed to bring back the copper-colored patient to health, then the demon was too strong for the Medicine Man's "Manitou" and he was given sepulcher, according to the custom of the tribe to which he belonged. If any of you ever visit the famous Rat River on trout-fishing bent, you can still see the dead Pottowatomie Indians, wrapped in blanket and bark, reposing on platforms lashed high up in the trees.

During the French occupation, very famous priests for long years endeavored to save the souls



DR. B. C. BRETT, GREEN BAY
(Taken at the age of 94. Dr. Brett is now 96 "and going strong.")

of the inhabitants, but, so far as can be ascertained, no one came to minister to the diseased bodies.

From August, 1816, and almost continuously until 1852, Fort Howard was occupied by U. S. troops, and during this period, the Fort Surgeon, if he had time, did some professional work for the civil population. During this period, three fatal cholera epidemics visited the district. In 1832 occurred the first visitation, and there was not a practicing physician throughout the county. The post surgeon attended the sick, when possible, but often it was the priest, alone, who was called in to minister to those stricken, as well as to shrive the dying and bury the dead. General Scott's troops, on their way to the front, were attacked by the disease at Detroit, and many died. Hardly a household at Menomineeville was spared from the scourge. Two years later, in 1834, the cholera again visited the region, and Father VandenBroek, in charge of the Mission at Menomineeville, records as follows:—"It often happened that while I was attending the sick, sometimes even while confessing them, they died at my side, so that we could not get enough people to dig the graves. We

had to bury four or five in one grave. We could not even find people enough to prepare the bodies for burial and I had to bury them myself, assisted by two Sisters of the Order of St. Claire." The settlement on the east side of Fox River was known in the early days as Menomineeville. About 1829, the prospective cities of Navarino and Astor were platted and were ultimately united under the name of the borough of Green Bay.

The surgeons stationed at Fort Howard from 1824 on, were an important factor in the life of the time, for there were no other physicians within two hundred miles, so that in sickness or accident, messengers would hurry to the fort to obtain medical aid. Dr. William S. Madison, post surgeon at Fort Howard in 1821, was undoubtedly the first physician to come to Brown County, or, indeed, Wisconsin. Madison married, according to the custom of the time and place, an Indian girl, and may have intended to desert her, for he was on his way to visit his family in Kentucky, when shot by Ke-tau-ka, brother of the girl, who was acting as guide.

"While the garrison party was resting not far from the lake, where Manitowoc is located today, Ke-tau-ka wandered away to an Indian village, where he found a band of his people commemorating their exploits in war by throwing a hatchet at a post as many times as they had killed men. They taunted the strange lad on never having slain anyone, when he immediately returned to the camp, and stealing up behind Dr. Madison, who was leaning against a tree, shot him in the back. Returning, he informed his band of the deed accomplished, but far from upholding him in the crime, they seized him, and handed him over to the Fort Howard detachment, but Dr. Madison had already died. The Indian was taken to Detroit for trial, and later executed.

In 1824, Dr. Walter V. Wheaton held the position of post surgeon, a favorite alike with the garrison and civilian. He was an able physician, was fond of society, had a pretty wife and a scapegrace young brother, who, on one occasion, in the absence of Dr. Wheaton, successfully amputated the leg of a soldier who had lost his way on the Bay and been badly frozen.

DR. BEAUMONT

The most celebrated of the army surgeons stationed at Fort Howard was Dr. William Beaumont, who succeeded Dr. Wheaton in 1826. Near the surgeon's quarters in the old fort at Mackinac Island, stands a rough boulder with tablet attached, erected by the Michigan Medical Society, to commemorate the experiments of this eminent physician, who after leaving Fort Howard, was stationed at Michilimackinac in the early thirties.

A French voyageur, Alexis St. Martin, a typical resident of the fur trading villages of that day, living in one of the quaint houses covered with

bark that in old times were strung along Mackinac's waters edge, was accidentally shot in the stomach while lounging in the Astor Company's trading house. The surgeon from the fort on the hill, Dr. Beaumont, was hastily summoned, who, after making an examination and dressing the wound, left, saying that the young man would probably die before morning. The next day, the doctor found St. Martin not only living, but showing increased vitality, and the case became interesting. In time, a curtain of skin grew over the aperture, and by lifting this, the physician could follow the process of digestion perfectly. Beaumont's experiments and memoranda, which he carefully kept for years, have proved of great and permanent value, and as the memorial tablet records, added glory to his name and to the profession which he adorned.

Dr. Beaumont was followed at Fort Howard by Dr. Lyman Foote, distinguished as a physician in army circles, and also had a large outside practice. He, in turn, was succeeded by Dr. Satterlee, who, with his wife, came to the Fox River fort in the early thirties. They were a young and handsome couple, much liked by the civilians, and were among those instrumental in establishing the Presbyterian church in Green Bay.

Dr. Worrell seems to have been stationed at the Fort at the same period. In the meantime, however, Dr. David Ward had taken up his residence in Menomineeville, and later, in Wrightstown, and in addition to his regular practice among the townsfolk, served as Fort surgeon when any vacancy occurred. He also attended the detachment of troops engaged in putting through the military road.

The government census for 1850 gives the entire population of Brown County as 6,215, and that of 1860 as 11,795. A period of growth and development occurred between 1850 and 1870, with the lumber business flourishing. Doctors came, tarried for awhile and moved on. Some of them made so little impression on their times that even their names have been forgotten, but a few of them were men of force and remained long enough to leave an indelible impression on the history of this region.

Dr. A. B. Williams settled at DePere in 1847 and, except for a few years spent in the West, lived there until his death in 1875. He had a large practice and found it necessary to import a partner, Dr. Johnson from Illinois. A young physician settled in Green Bay who advertised in the Green Bay Advocate, claiming he was able to perform many wonderful surgical feats. In order to meet this competition, at the earnest solicitation of his friends, Dr. Williams inserted the following notice in the Advocate for one issue. "Dr. A. B. Williams still resides at De Pere and intends to practice medicine and surgery if called upon. His medicine is of the pure gelicum whilicum aurora borealis, coated over with elicum frasier fat and knocks the foundation from the ague. He has a microscopic eye and a stethoscopic ear, and can see as far into a mill stone as the next man. His preceptor was a hyena for human flesh. He trusts one year and takes grain if he can get it." The next week, the Green Bay doctor's advertisement was cut down to a card.

Dr. Louis Carabin, Sr., came to Green Bay in 1846 and died here in 1864. He was a man of ability, not alone in his profession but in the real estate business. The first house in West DePere was built by him. His son, Dr. Louis Carabin, Jr., graduated from Bellevue Hospital Medical College, New York City, in 1879, and practiced here in partnership with Dr. C. E. Crane.

Dr. C. E. Crane graduated from Western Reserve College in 1849, came to Green Bay in the same year and practiced here until his death, 1892. He was a man of force, an able surgeon and served as such in the Civil War. He was mayor of Green Bay in 1874-75-77-78.

Dr. Isreal Green lived to be over ninety years of age. He was graduated from the College of Physicians and Surgeons, New York, in 1816, and practiced in Green Bay from 1849 to 1881.

Dr. Cooper Ayres graduated from University of New York in 1848, located in Green Bay in 1850, served as surgeon in the Civil war and in the Assembly in 1868-71-72. He was an able physician and a man of great worth to this district.

Henry Rhode, M. D., graduated at Heiligenstadt in 1847 and Gottingen in 1851. He came to Green Bay in 1859 and became one of the leading physicians of the city, practicing here until his death.

Dr. A. H. VanNorstrand graduated from Vermont Medical College in 1846, served in the Civil war, was superintendent of the Wisconsin State Hospital at Madison until 1868; served in the Assembly from 1852-1855 and lived at Green Bay but did not practice medicine here.

Dr. James T. Reeve, a graduate of Castleton College of Vermont and Jefferson Medical College, Philadelphia, began practice of medicine in DePere in 1856 and a little later, established himself in Green Bay. In 1861 he entered the army and when he mustered out, located at Appleton.

About the time of the Civil war, there were three physicians in Green Bay who were known as "Fish, Flesh and Fowl,"—Dr. Herring of whom I have been able to find little save that he lived here; Dr. Lamb who came to Green Bay in 1864 and acquired a flourishing practice, and Dr. C. E. Crane, of whom I have already spoken.

There was also another Dr. Crane, Dr. H. O. Crane, who served in the Civil war and was appointed examining surgeon for this district by the Provost Marshal. He was active and earnest in his profession and ranked among the most skillful physicians in the state, practicing in Green Bay from 1864 to 1872.

Dr. P. Marchand located in Green Bay in 1865, and was the first French regular physician who settled in the county.

Dr. Andrew Munroe came from Scotland in the sixties and practiced here until his death. He was in great repute as a diagnostician and for his knowledge of therapeutics.

Dr. B. C. Brett who is in his ninety-sixth year and is the sole survivor of the many who ministered to the ills of our city and the surrounding country in the early days, chose Green Bay for his home in 1872 and is so well-known and beloved by the community that it is not necessary for me to go into detail as to his work here. He graduated at Dartmouth in 1859, served in the Civil war and came to Green Bay from Brodhead, Wis., where he practiced for a short while. About the time he came to Green Bay, there were the Doctors Elderkin, Bartran, Pierce, Peake and Nanscawen practicing medicine on the Fort Howard side of the river; also one woman physician, Dr. May Camm, a homeopath. Doctors C. E. Crane, Monroe, Lamb, Marchant, Rhode and Green were practicing on the east side.

Shortly afterward, Dr. Austin Olmsted located here and for many years he had an enviable practice and was justly famed as an obstetrician. Dr. W. H. Squire practiced in partnership with Dr. Olmsted for a number of years.

There came a little later Dr. H. S. Leffingwell, our first specialist in eye, ear, nose and throat, and Dr. E. B. King, a native of Green Bay.

At DePere, following Dr. Williams, came M. H. Fisk, M. D., Drs. D. W. Emery, J. A. Jackson, P. Carscadden and still later, Drs. H. M. Kersten, Andrew Mailer, and our genial old friend, Dan Gregory. The Dr. Jackson here mentioned is the father of the Jacksons in the Jackson Clinic, Madison; men of note.

Dr. Bartran of Fort Howard, was a graduate of the University of Michigan. He came to Green Bay in 1868 and served as asemblyman for two terms, 1873-75. He was not only an able physician but a public-spirited citizen, serving as mayor of Fort Howard and as superintendent of schools.

During the eighties, a number of physicians came and went. The names of some are known; for instance, Dr. Protheroe who could not make a go of it here, left and settled in the state of Washington, becoming wealthy. Dr. Palmer, having indifferent success here, moved to Illinois where he became well-to-do.

In the early nineties came Dr. Slaughter and Dr. Lewis who were partners. They attempted to start a hospital on Shawano Avenue, but with poor success. Dr. Lewis left to try his fortunes in a new place. Dr. Slaughter stayed until his death.

Dr. Hans Max Beck graduated from Rush in 1883 and practiced in Green Bay until his death. He was an able physician, jovial and much liked by the profession.

Several very promising young physicians of Green Bay were cut short in their career by an untimely death. Among these were Dr. Ira Martin, Dr. Nickelson, Dr. De Both, Dr. F. N. Brett and Dr. George King. Dr. R. H. Sweetman succeeded Dr. Nickelson, practiced here thirteen years and then sought a new field. Dr. J. H. Gibson was another of our physicians who practiced here during the later years of his life.

From the early nineties on, the city has grown fast and a great number of physicians have sought Green Bay as a location. Some have left for new fields. It is probable that some have been omitted but no record of their coming or going has been found. A large number of men who rank high in the profession of medicine and surgery are laboring in our midst and are well known among us. They do not belong to the past but to the present and I will not touch upon them in this paper.

THE HOSPITALS

It is fitting that a brief sketch be here given as to the origin of the several hospitals in which we work or in which our predecessors worked. The original hospital erected in 1816 to serve the military units stationed at Green Bay is still standing but is used as a dwelling.

Not until after the great fire in Peshtigo in 1871 when there was a mighty influx of sufferers from that direction to Green Bay, was anything done in the way of establishing a hospital. A large public subscription was raised by public-spirited citizens of Green Bay for the care of these sufferers and the following year, the unexpended balance of this subscription was turned over to the Society of Christ Episcopal Church who had organized a society for the purpose of creating a home for the friendless and destitute of the city of Green Bay, the year after the ending of the Civil war. The building of what was named the Cadle home was commenced on the church property at the south-west corner of Madison and Pine street. The structure was of wood, 66 x 54 feet, two stories high, and had twenty-two rooms. Although poorly constructed for a hospital it was thankfully so used for eight or ten years. It had no accommodations for the aseptic method of surgical treatment. Clean hands, instruments and dressings; also a clean, dustless room, was regarded of the highest importance, and many severe cases made quite a brilliant recovery. There were no trained nurses in the city and physicians and surgeons had to themselves do what is now assigned to the nurse. All of the physicians of the city attended patients at this hospital. There were never at one time more than five or six patients in the hospital and it was discontinued as a hospital in 1878 or 1880. However, its existence in Green Bay was considered a necessity and much credit was given to the ladies of the Christ Episcopal Church for their vision, foresight and energy in the creation of this institution. To them must be given the credit of installing the first hospital in the city of Green Bay.

Two nurses, Miss Mame Wagner and Miss Julia Skidmore, opened a hospital in the old Henry Baker home on Main street, somewhere around 1893 or 1894. It was called the Montrose Hospital and is chiefly of importance because some of the first abdominal surgery was successfully performed there.

St. Vincent's Hospital was the first permanent hospital in Brown County. It was opened for the reception of patients in December, 1888. The physicians of Green Bay and DePere had for several years felt great need of a properly equipped hospital, presided over by skilled nurses, and several attempts had been made to start hospitals in rented houses, with no permanent results. The last effort for a hospital had its commencement in the fall of 1888, when the leading physicians met in the office of Dr. Brett and started a subscription to a fund for the maintenance of a hospital in Green Bay. As soon as the project became known, Father Kersten interviewed the doctors, stating that the Catholic Sisters had been planning to start a hospital, and inquired if the physicians would be satisfied to have them carry out the scheme of establishing a hospital. An emphatic "YES" was the answer, and St. Vincent's hospital of today is the result. At first, a house on South Quincy St., Green Bay, originally the residence of Dr. A. H. Van Nostrand was purchased and fitted up and found capable of accommodating thirty patients. This building was used for six years, when it seemed that a more complete and larger structure was greatly needed, because requests for admission much exceeded the capacity of the building. In 1894, a new and commodious structure of the most approved pattern, with all modern conveniences, was erected on Webster Ave., corner Porlier St. Since this was built, at intervals, other large extensions have been made as increasing patronage demanded.

Under the direction of the Sisters of the Miseri-

corde, St. Mary's Hospital was established in 1900. It was incorporated in 1905. The capacity at opening, was twenty-five beds. The west wing was built in 1902, increasing the number of beds to fifty-five. In 1912, the south wing was built, raising the capacity of the hospital to one hundred beds. Since that time, other extensions and a beautiful nurses home have been built.

The Wisconsin Deaconess Hospital, now known as the Bellin Memorial Hospital, was commenced by two Deaconess nurses who came from Cincinnati, Ohio, to Green Bay, in the fall of 1908. They rented a building on North Adams street, known and used as the General Hospital by Dr. F. N. Brett, capable of accommodating about fifteen patients. In the following year, the former residence and grounds belonging to D. W. Britton, on South Webster Ave., was purchased and the hospital permanently located there. In 1916, a new fireproof building having been completed, it was dedicated and incorporated. Since that time, several large additions have been built. To the late Dr. J. J. Bellin goes the credit for the growth and development of this beautiful institution.

The three hospitals have all from humble beginnings grown to be institutions of utmost service to the sick, with up-to-date laboratories, x-ray departments and operating rooms, and compare favorably with the hospitals of any city. They handle about 12,000 patients in the course of a year.

The medical profession has reason to be proud of the part taken by its members in the development of Brown County and can feel a glow of satisfaction on reviewing the activities of their departed fratres.

I have winnowed out a little wheat from the chaff lying on history's threshing floor and will gladly turn over to some more industrious worker a large amount of material from which he can gain such honor as comes to historians.

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Smoke? Fire! — Hemoptysis? Tuberculosis!

By A. A. PLEYTE, M. D.
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There is no fire without some smoke. But smoke is only one way a fire makes itself conspicuous to us. A fire which is burning brightly also gives off heat, light, flames and a glow. It will progress if uninterrupted until it has completely demolished everything which is inflammable that may come in its way. A spark may be thrown or carried by the wind for a considerable distance and under favorable conditions start a new fire.

A smouldering fire may not be seen or felt, but we know there is some heat or smoke liberated. The evidence of such a fire is so meagre that our senses may not detect it. By careful search, however, a hidden fire may be discovered. The apparent fire is detected most easily but frequently hard to put out. The concealed fire is very difficult to root out, but once detected, it is usually easily extinguished.

There is no tuberculosis without some telltale finding. The disease is frequently apparent. When it is evident we expect the patient to be sick. Fatigue, loss of weight, anorexia, hemoptysis, cough, expectoration, dyspnoea on exertion, pain in the chest, hoarseness and night sweats are common symptoms of obvious pulmonary phthisis. It will frequently advance, unless the patient is treated most carefully, like the advance of the uninterrupted fire, until the life of its victim is destroyed. The patient, too, may be the source of infection for other members of his family, with almost the same certainty as the spark from a fire will start a new fire nearby when conditions are right. Whether or not the infection develops into disease in other members of the family will depend upon the hereditary stamina, immunity and mode of life of these other members.

Occult tuberculosis, like the smouldering fire, is usually not noticed by the patient. He is not sick. But where the disease exists, even in a very latent form, there will be some symptom, sign or evidence present. The means of recognition commonly used may be of little avail. Only by most careful study, observation and examination is the latent form of tuberculosis discovered. While it is so frequently difficult to diagnose, it is, when recognized, fairly easy to control. Many patients have occult phthisis for many years preceding active forms of the disease. It is these dormant cases which respond most readily to a properly regulated life.

We find the following questions most helpful in recognizing pulmonary tuberculosis and differentiating it from other pulmonary infections.

1. Can we be reasonably sure that the family history is negative to tuberculosis?

2. Does the patient's history show him to be free from intimate and prolonged contact with the disease?

3. Is his history negative re pleurisy with effusion or large hemoptysis?

4. Does the course of his illness show him to have been free from remissions and exacerbations of symptoms and physical findings?

5. Are physical findings absent in the upper half of the chest?

6. Are we certain that the patient has not lost his voice and that he has not had persistent diarrhoea?

7. Have repeated sputum examinations failed to show tubercle bacilli?

8. Were the tuberculin tests negative?

9. Do guinea pig inoculations fail to show tuberculosis?

10. Do the x-rays show the apices of the lungs to be clear?

A brief consideration of these questions in the order I have enumerated them will help clear up any doubt as to their value.

1. When inquiry is made into the *family history* we should remember that twenty years ago typhoid fever, malaria, nervous prostration, pneumonia and pleurisy were sometimes diagnosed, when in reality the patient was tuberculous. It is always well to ascertain, if possible, the symptoms of any protracted illness from which a grandparent, parent, brother or sister suffered.

2. *Contact.* By intimate contact is meant such intimate association as would occur between a nursing mother and her babe, or between brothers and sisters living in the same house. A mother with open tuberculosis can easily transmit the disease to the babe. But in the case of brothers and sisters, one of whom has the disease, close association at home must persist over a prolonged period of time (1 to 3 years) before the others develop the disease.

3. *Pleurisy with effusion* is due to tubercle bacilli in the majority of cases. It is always safest to consider simple pleural effusions as of tuberculous origin until other definite etiological explanation can be reasonably given.

Hemoptysis of more than one dram must be considered as due to pulmonary tuberculosis unless and until other location and cause is found. The great majority of patients who cough up blood are tuberculous. With a definite history of hemoptysis, we have evidence which is as presumptive of tuberculosis as smoke is an expression of fire.

4. *Remissions and exacerbations* of symptoms and signs are quite characteristic of chronic phthisis. More than 90% of the tuberculosis we see in general practice is of the chronic type. It is well worthwhile, in the differentiation of chronic pulmonary infections—of which tuberculosis is one, to inquire most carefully into the past personal history. Records of previous examinations and stereoscopic x-ray films will be very helpful in estimating previous tuberculous disease. Densities of x-ray shadows which vary as to age are significant.

5. *When the upper half of the chest alone* reveals physical findings we should suspect tuberculosis first, and hold this suspicion until other facts or proof to the contrary show the definite cause. Here, again, the fact is that the majority of patients with objective evidence of disease in the upper half of the chest are tuberculous—but not all are active cases. By inference, signs limited to the lower half of the chest are usually non-tuberculous. However, more patients below eighteen years of age are being found today than ever before, with lower lobe findings due to phthisis.

6. *Loss of voice and persistent diarrhoea,* in the present or past history, which have no other satisfactory explanation, are suggestive of tuberculosis.

7. *A positive sputum* is still the most valuable fact obtainable. It is characteristic of tuberculosis. Many examinations of the sputum, when obtainable, should be made, for a few negative sputums have little or no value, whereas the positive sputum is diagnostic of the disease. These examinations are made without charge by the State Hygienic Laboratory and its Branch Laboratories.

8. *Tuberculin tests,* when properly made, carry weight in distinguishing consumption from other chronic pulmonary infections. Negative reactions speak against tuberculosis. Infection of the general population with tubercle bacilli has been materially lessened, due to the fact that the death rate from the white plague has been cut in half in the

past twenty years and that many patients with open forms of the disease have been segregated. A negative tuberculin test, therefore, is obtained much more frequently today and should be called for almost daily as a valuable diagnostic procedure.

9. *Guinea pig inoculations* of material obtained from an abscess, sinus, suppurating gland, tumor mass, or other source, in an aseptic manner, is further positive ground for saying a patient is tuberculous, when the guinea pig shows the disease.

10. *Stereoscopic x-ray films* of the chest may be worth much or very little, depending on the type of the disease, the symptoms and signs noted on physical examination, and other factors. X-ray films are at best but one means of recognizing disease.

It is apparent, from the preceding questions and their very brief consideration, that tuberculosis in its various stages is very well compared to a fire. At times the disease reveals itself to all of us. At other times it baffles the best of us. But, like the smouldering fire, the cases of concealed phthisis will give some clue of its presence if we search for it. Consumption is truly a consuming disease, as its name implies, when conditions are favorable to it. Our part as physicians is to know the disease in the many ways it reveals itself. Then we will be able to diagnose it early and help prevent its development most frequently.

THE JOURNAL CLINIC

Diagnostic Problems

By L. M. WARFIELD, M. D.
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Last month we had the case of a Jewish woman forty-nine years old, who on April 1, 1928, was seized suddenly with a violent headache associated with a very transitory paralysis, so-called. Her pain had become so intense in a week that she became maniacal. Since her neck had become stiff and fever remained high she had been diagnosed meningitis and was being given enough morphine to keep her manageable.

DISCUSSION

This case obviously is one involving the brain or brain stem. Several conditions must be ruled out in the differential diagnosis of this case including acute epidemic meningitis, syphilis, tuberculous meningitis, brain tumor , brain abscess, vascular accident and epidemic encephalitis.

The spinal fluid findings rule out the acute epidemic meningitis, as the negative Wassermann of blood and spinal fluid rule out syphilis. The age of the patient, lack of tuberculous foci elsewhere in the body, and the sudden onset speak against tuberculous meningitis. Relatively negative ophthalmoscopic findings and the sudden onset argue against brain tumor. Brain abscess is unlikely as there was no evidence of previous ear, nose or throat pathology. Lack of hypertension and of any actual paralysis minimize the possibility of vascular accident. There is left to consider, only epidemic encephalitis.

What have we in support of epidemic encephalitis? We have the tranistoriness of certain signs, as the so-called paralysis, and the irritative involvement of the extra-ocular muscles. We have the unilateral ptosis and pupillary findings. We have the nearly clear spinal fluid negative for pus or organisms. That the fluid was slightly hemorrhagic does not speak against encephalitis as we have seen it so in other such cases. Finally we have the very characteristic finding that the patient could be roused to answer questions from an apparently deep coma and then would immediately fall back into a semi-stupor.

One sign of differentiation between meningitis and epidemic encephalitis is the stiffness of the neck muscles. Usually in the latter disease this is not present but occasionally there is a slight transitory stiffness which produces a confusing picture as in this case and often leads to an incorrect diagnosis.

It is interesting that in 1915 Drs. Opie and Alford reported the use of high carbohydrate diets as protective against liver and kidney toxins. More recently Alford has suggested the use of glucose intravenously for epidemic encephalitis. This was done in this case with apparent marked improvement so that within three days there was subsidence of fever and neck stiffness. In three weeks she was able to leave the hospital. Since then there

has been a gradual and almost complete recovery from her insomnia, emotional instability and general weakness. The next year or so will decide of course whether this improvement is more apparent than real and whether the process may not actually still be insidiously progressive.

A New Collapsible Esophageal and Cardiospasm Dilator

By J. P. ZOHLEN, M. D.
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The subject of dilatation of esophageal strictures and for cardiospasm has occupied the attention of many notable writers during the course of the past thirty odd years. Various authorities have devised various types of instruments to dilate for esophageal strictures and for cardiospasm, notable amongst whom are: Einhorn,[1] Sippy,[2] Plummer,[3] Rosenheim,[4] Gottstein,[5] Myer[6] and Schreiber[7]. These various dilators have, during the course of time, practically all fallen by the wayside, until today the Plummer and Sippy esophageal dilators seem to have best stood the test of time.

It appears to be generally conceded that the Plummer esophageal dilators have a distinct advantage over the Sippy olives, insofar as the Plummer dilators are longer and likewise do away with the conical shape of the Sippy cones which have a tendency to slip, so to speak, out of the stricture when in situ. However, all these esophageal dilators are so constructed as to forcibly dilate from above downwards. It is the writer's firm conviction that the principle of lateral dilatation, judiciously employed, is certainly preferable. Plummer in 1908 reported that he had treated forty cases of cardiospasm with the hydrostatic dilator an instrument which is still in use. Since then Vinson and others have used the Plummer hydrostatic dilator for cardiospasm.

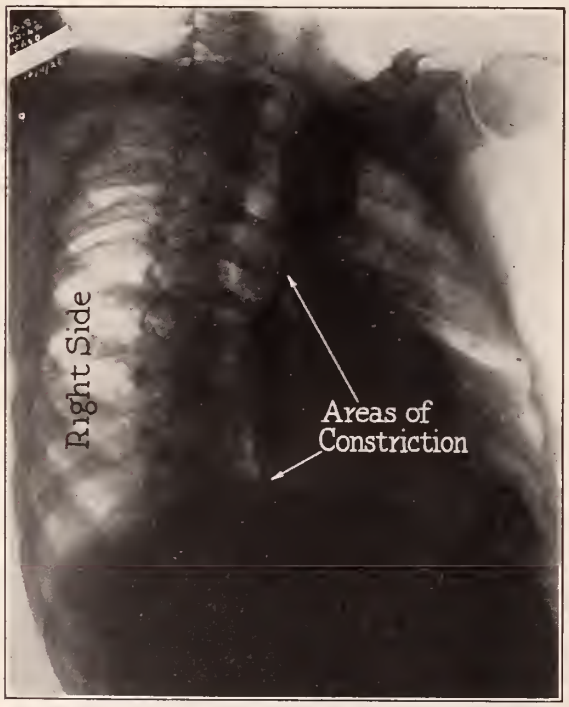


Plate A[1] shows skiagram of Mr. A. S., who came for observation on December 11, 1928, with a history stated briefly as follows:

Age forty-two years, epigastric and substernal pain during past two months, especially after meal-time. Feels as though "foods keep sticking" in chest. Frequent eructation of foods and vomiting during past two months; dreads to eat on account of distress; slight loss in weight.

Patient was x-rayed and a diagnosis of multiple stricture of the esophagus was made. During the following three weeks the esophagus was twice dilated.

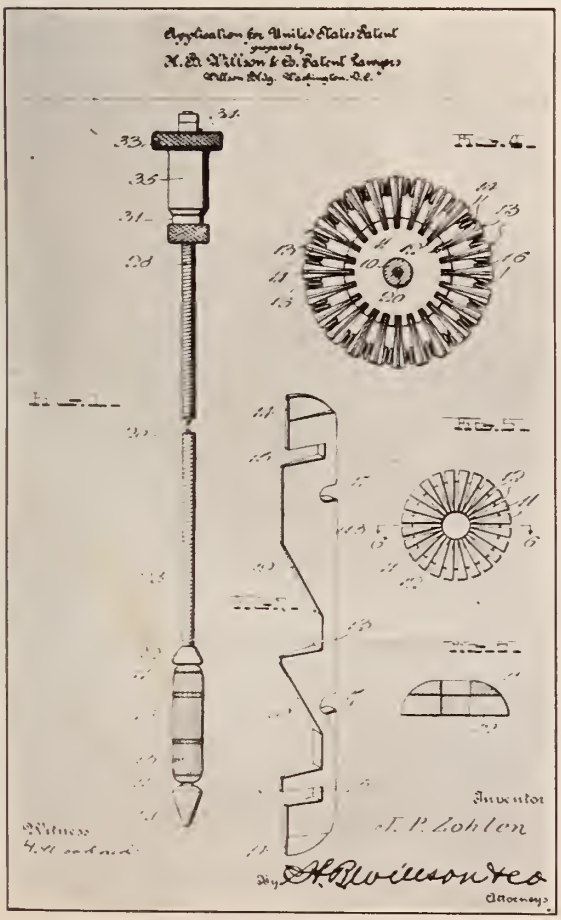
Plate A[2] shows skiagram of same patient on December 30, 1928, with dilator beyond area of the two strictures.

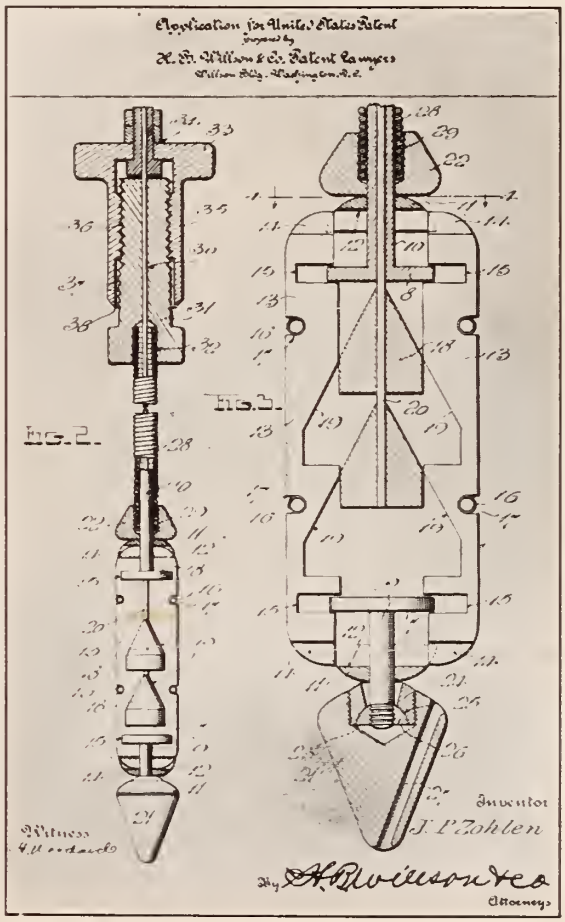
Rehfuss in his book "The Diagnosis and Treatment of Diseases of the Stomach," Page 829-30, in speaking of the treatment of cardiospasm by means of the hydrostatic dilator, says: "There are recurrences according to Vinson in about twenty-five per cent, usually noted within the first six months after treatment. Fourteen hundred and fifteen patients, according to Vinson, showed four deaths following dilatation, showing that the procedure is not without risk." The writer feels that

the hydrostatic dilator is an unsafe and even dangerous apparatus and believes that it is rarely, if ever, necessary to stretch the cardia for cardiospasm to the extent that the instrument is made to stretch this part of the organ. It can readily be seen that the temptation to give an unusually wide dilatation or stretching is great when it is felt or known that the patient cannot be further controlled or seen at more frequent intervals. It appears to the writer to be more within the realm of safety to dilate less and oftener when necessary and possible.

Einhorn in 1909 constructed a metal dilator for cardiospasm, which, as he states, was certainly preferable to the inflatable dilators, since it was easier to handle and worked quicker.[8] Whilst the Einhorn dilator possesses some distinct advantages, nevertheless, it has some objectionable features, one of which is the great amount of rubber on the instrument(shaft and expanding portion) which must, of necessity, mascerate and deteriorate. This is especially true of the Plummer dilator.

After giving the subject serious consideration, the writer set about to construct and perfect an all-metal collapsible instrument which could at once be used as an esophageal and as a cardiospasm dilator. The instrument is made in two sizes, the larger size being used in cases where more than ordinary dilatation or stretching is desired in certain cases of cardiospasm. But for all ordinary cases the smaller size will suffice for both esophageal and cardiospasm dilatation, the instrument dilating to size sixty French (Char.). The larger size dilates to size eighty French (Char.). If any special size is desired, such size can readily be made to suit the individual needs of the physician. That such an instrument, as under consideration, has a distinct advantage for esophageal dilatation in place of the series of olives or cones now in common use, can be readily appreciated, for it does away with the repeated insertion and withdrawal of various sized olives which is time consuming and trying both to physician and patient; trying to patient from both the physicial and psychical view-point. It is likewise preferable to the hydrostatic dilator for cardiospasm since it is simpler in construction, easier and safer to handle and





having no rubber parts. If, for some reason or other, the operator does not wish to expand the olive when in situ, he can expand the instrument to any desired degree before introduction and then dilate as with any of the old olives.

The new collapsible esophageal and cardiospasm dilator consists in the main of an advancing olive, a larger expansible olive, which in turn is followed by a semi-olive, a flexible shaft and an adjusting wheel over a threaded thimble.

The advancing olive is so constructed as to embrace the features of several of the smaller Sippy olives. It is triangular or wedgeshaped and sets in a ball-socket joint, thus making it flexible, so that it easily takes the course of least resistance in its downward passage in the esophagus. An opening at the extreme end enables one to thread the olive onto a silk thread swallowed the day previous to dilatation. (It has been the writer's practice to fold approximately six feet of the silk thread and insert same into a No. 00 gelatine capsule for swallowing. Any knotting in this capsular portion will, of course, not impede the downward course of the instrument over the thread.) The greatest dimension of this olive abuts and lies in the same plane with the collapsed expansible olive, thus acting as an entering wedge for the following expansible olive. Its length is five-eighths of an inch. The tip of the advancing olive is so made that a metal spiral tip can be attached thereto if the operator so desires.

The expansible olive has in the main the shape of the Plummer olives being, however, slightly shorter. It consists of twenty-four solid segments, each segment forming a part of the cylindrical olive held in place by two inner expanding wedges or cones, two inner discs, (also called front and rear retainer) two stabilizers (one on either end) and two outer circular springs setting flush with the outer plane of the segments. Whilst dilating, the segments are held perfectly true by virtue of the two discs and the two stabilizers. The fenestration encountered, when fully dilated, is insignificant and it is very unlikely that any folds of tissue would become enslaved or enmeshed therein; however, to make the instrument fool-proof, the author advocates drawing a short piece of thin rubber tubing (quality, as finger of surgical glove) over expansible segments. This will also prevent any mucus or secretions from entering the olive proper. This rubber can be obtained in long tubing and cut as it is being used, suitable for the purpose, the cost being so nominal that the used rubber can be immediately discarded. This will always insure of having a healthy rubber. The ends of the rubber need not be anchored or fastened.

The semi-olive is so constructed as to facilitate the withdrawal of the instrument. It is one-fourth of an inch long, its greatest dimension abutting and lying in the same plane with the collapsed expansible olive, then tapering down to the flexible shaft.

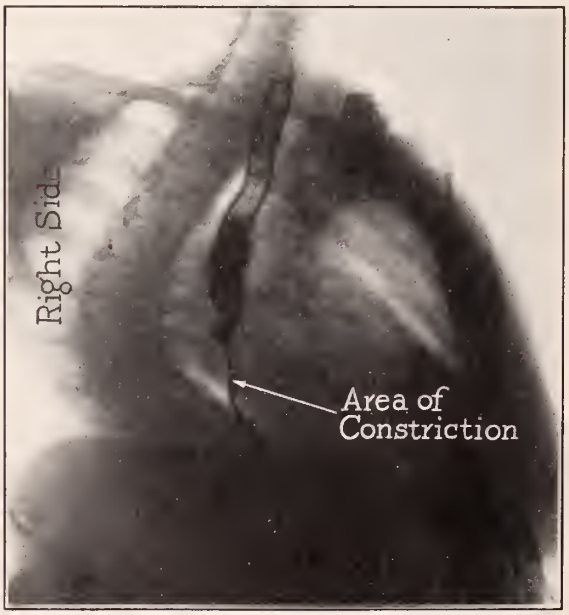


Plate B[1] shows skiagram of patient Mrs. O. S., with tight stricture from carcinoma of cardia.

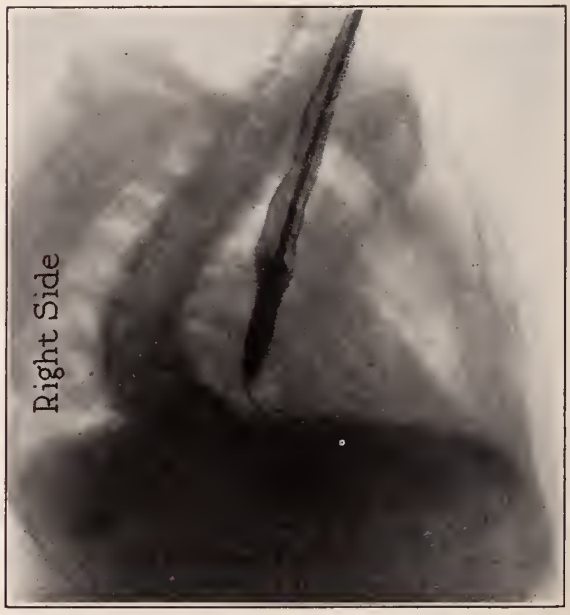


Plate B[2]. Same patient with dilator in situ.

The shaft consists of a flexible spiral metal tubing enclosing a strong transmission wire.

The adjusting wheel travels fast over a double left-threaded thimble, enabling the operator to dilate rapidly if desired.

Five annular graduations on the thimble informs the operator as to the degree of dilatation. Two locknuts on the proximal end of the instrument keep the graduations true at all times.

To cleanse the instrument after use, same can be rinsed in a mild non-corrosive antiseptic solution, then slightly dilated to partly open expansible olive to facilitate drying.

It is astonishing with what ease the instrument can be introduced and withdrawn and the rapidity with which it can be fully dilated within a period of time measured in seconds.

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TUBERCULOSIS and OTHER CHEST CONDITIONS

The Life Cycle of the Tubercle Bacillus

By T. L. HARRINGTON, M. D.
Milwaukee

Most physicians believe that if the germ of tuberculosis is present it appears as Koch's acid-fast bacillus. The belief is quite general in the profession that the organism multiplies only by fission.

Shortly after Koch's discovery of the tubercle bacillus investigators described non-acid-fast granules which, it was claimed, ultimately grew into fully developed acid-fast tubercle bacilli.

It has been known for many years that the pus from cold abscesses contained few tubercle bacilli, and in some cases none could be found. Yet, animal inoculation with such pus results in quite a high percentage of positive infections. In this pus, acid-fast granules are sometimes found. These acid-fast granules, and occasionally tiny rods, may be seen in bunches or singly.

Calmette and his followers teach that the bacillus of Koch is an advanced stage of the life cycle of the organism, and that a filterable virus capable of transmitting the disease precedes this advanced form of the germ. He teaches that infection of the foetus in utero by this filterable form of the germ is not uncommon. Our American observers have not generally accepted the claims of the French school.

A series of carefully conducted experiments at Cornell University* during the past year would indicate that those observers are probably right who claim that the organism may pass through the granular stage, and that sometimes it may appear as a very tiny rod, so slender that measurement is not possible. Those tiny rods and granules may or may not take the gram stain, depending on the stage of development. It would appear that they are gram positive if they have a surrounding capsule, and gram negative before the capsule develops or if the capsule has been dissolved.

The value of the Cornell studies appears in the precaution taken in placing but one bacillus on most of the slides, and not more than four organisms on any slide. The slides were hollow ground and carried a nutritive medium over which a cover glass was sealed. After making careful drawings of each organism the slide was placed in the incubator at 37.5 C. The slides were studied at 24 hour intervals and drawings again made if there was any change in the picture.

At from 24 to 72 hours, and sometimes longer, lines of cleavage became evident. The cleavage was

*"The Developmental Cycle of the Tubercle Bacillus as Revealed by Single Cell Studies," American Review of Tuberculosis, December, 1928.

(Continued on page XXIV)

The Wisconsin Medical Journal

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EDITORIALS

DR. F. E. WALBRIDGE

IT IS difficult to set forth the thoughts that come as one reviews the contacts of a lifetime. To do so demands marshalling in review many happenings, and to stress but the few that seem dominant themes.

In speaking of Dr. F. E. Walbridge, who died in California on February 12th, whither he went to recuperate from an attack of pneumonia, I must strike a personal note, because, despite a considerable discrepancy in years, I found myself closely attached to Dr. Walbridge by many intimate associations during a period of two decades.

The opportunities for study, in preparation for medicine, which are now universally offered, were denied those earlier pioneers of Dr. Walbridge's day. All the more praiseworthy, then, the success which crowned the efforts of those who rose above these handicaps, and—reaching for a goal—attained it by sheer will to do. An idealist always, plain spoken, large-hearted as he was big in body, a personality that appealed because simplicity and sincerity were there in bold relief—these qualities made him the beloved physician, the trusted surgeon.

It was given to a number of us juniors in the profession to see much of Dr. Walbridge in his private life—both in Milwaukee and at his home in Stevens Point. After retiring to his northern home, about 18 years ago, he enjoyed life anew amidst scenes he knew so well how to love and appreciate; the little farm that gave him the activity he craved; the surging river that proved a daily fascination; the freedom from city toil and professional care—things he once craved, now spoken of only in retrospect as happenings of a distant past—leaving him a peculiar sense of security in his forest and river retreat.

Many honors were Dr. Walbridge's while following his profession in Milwaukee: he was at one time or another president of the local and state medical societies; member of the State Board of Medical Examiners; first president of the Wisconsin Medical Journal, in which capacity, my being its then editor, we came into close and daily contact; member of various hospital boards, etc.

The love which his patients bore this big-hearted man, with his characteristic resounding laugh, was the highest tribute that could be paid him, and these he valued far more than the honors that were bestowed by the organizations I have enumerated.

And thus there passes from our view a man of the old school; a physician who preferred to retire to private life before his skill had become dimmed by age rather than risk obscuration of success by infirmities; a militant idealist in matters of morals and ethical conduct; a man noble in thought and deed. *A. J. P.*

"THE DOCTOR DECIDES"—AGAIN

THROUGH the enterprise of national, state and local tuberculosis associations, another nationwide early diagnosis campaign will be launched for the month of April. The interest and cooperation of the medical profession is earnestly

solicited. If for no other reason than one of enlightened self interest, the medical profession should back this enterprise one hundred per cent.

Some there are who consider the treatment of health and disease matters to be entirely a matter of concern of the medical profession. This, of course, shows an utter want of a sense of humor. One might as well fancy a shear of one blade as an early diagnosis of tuberculosis without cooperation of doctor and early victim.

The tuberculosis organizations are almost (though not quite) beyond suspicion in the lay mind of disinterestedness in their enterprise of bringing patients to doctors. Except in individual instances, the private doctor (or the associations of private doctors) can not reasonably expect their disinterestedness to appear so obvious. Therefore, as we have suggested above, we of the medical profession should be prepared to do our full part toward securing the very great desideratum: a considerable 1929 increase in the number of early tuberculosis.—*H. E. D.*

RADIANT THERAPY

FOR several years much has been said and written about the remarkable results achieved by the use of so-called "radiant energy" in the treatment of disease. Its effects in energizing growth and development of young animals and in the control and treatment of an unnumbered list of pathological conditions have been recounted in the medical and popular scientific journals and in the lay press. Companies have been formed to manufacture and exploit many devices for producing some or all of these forms of energy. These devices vary from simple colored electric light bulbs and hot wire electric heaters to the so-called carbon arc and quartz lamps. All these devices have been sold to physicians who have used them widely with no adequate knowledge of their properties or effects except that obtained from the glib-tongued salesmen. Having exhausted the visible supply of dupes in the medical profession, these salesmen are now turning to the general public for a market, and the devices formerly sold to the medical profession are being advertised in the lay press and sold in department stores and electrical shops to the laity "with complete directions for use." Even the bathing beauties of the Broadway theatres are being given their coat of tan by spraying them with quartz light instead of rollicking on the beaches in Florida.

At this time there comes a professor, Donald C. Stockbarger, Assistant Professor of Physics at the Massachusetts Institute of Technology, who tells us in The Technology Review what we have all long suspected but were not willing to admit; namely, that we know very little about the nature of the "radiant energy" we are employing and still less, perhaps, about the method of its production. He also says that the conditions under which these various wave lengths are produced are very uncertain and that at this time so many variable and uncontrolled factors enter into their production that we have little or no real knowledge as to the nature of the forces we are using. He furthermore states that at present we know even less about the effect of these forms of energy on living tissue either normal or pathological.

It would seem that with such a slender background of real knowledge it might behoove physicians at present to be a little conservative in their attitude regarding the use of so-called "radiant therapy" and especially about advising patients to purchase and use these devices indiscriminately, bearing in mind the fact that we do not yet know even the harm that may come from the use of such measures or the dangers that may lurk in their employment. *J. F. S.*

INTENSELY INTERESTING

THE writer has just read for the second time in two months "The Autobiography of a Surgeon" by Dr. John M. Dodd of Ashland* and rarely has he found a volume that held his attention so closely. Writing of his life as a physician, the author has woven a story, not exclusively of medicine and surgery, but of life as it was experienced by him from his beginnings in a frontier area, through the educational period, and finally taking up the life of a practitioner in what was then a frontier town of Wisconsin. Throughout the fabric of the story runs the bright thread of broad vision and interests.

Dr. Dodd writes of interesting events, of a historical period and the result is a volume as interesting as a novel. Because much is said of his practice in Wisconsin in an early day, every Wisconsin physician will re-live his own experiences as he journeys through with the author.

*Walter Neale, Publisher, 37 E. 28th St., New York City; $5.00.

THE PRESIDENT'S PAGE

H. W. Dacey

SHALL WE "LET GEORGE DO IT" AND CAN HE?

AT THE last meeting of the Council of the State Medical Society of Wisconsin someone remarked that the Wisconsin Medical Journal, as a Scientific Publication and as a medium to stimulate further graduate medical study, might be improved considerably and that by so doing the Journal would conform more closely to the ideals and wishes that progressive members of the Society had in mind. It seemed to him and, as we soon learned, to others also, that while its outward appearance is more elegant than formerly, its advertising pages more numerous, the personal news items longer, the reports of district and society meetings fuller and the publication itself financially self-supporting, in short, the trade interests of the profession taken care of, that the scientific value of the Journal to physicians of the state could be enhanced materially. One of the three members of the editorial board, at the meeting expressed himself similarly, and by personal interview and through correspondence with the board, we have since learned that they all share the same opinion regarding this point. They are not fully satisfied with the standard of the Journal as a scientific publication and would anxiously accept any action that will promise a change for the better.

What is the trouble? Agreeing on the symptomatology, what is the diagnosis, etiology and what the treatment? As far as I can gather, it is the aim of the managing editor to publish in the Journal the papers read at the Annual Meeting and the discussions as far as seems practicable, together with the excellent Clinics, editorials, personal and general news items, and things of interest and for the welfare of the profession. The management is in the hands of our very efficient secretary, George Crownhart, who, not being a medical man, is advised and supervised by an editorial board consisting of three of our ablest physicians of the State, Drs. Hoyt Dearholt and Oscar Lotz of Milwaukee and Dr. Joseph F. Smith of Wausau. The former, the secretary, as he should be, is paid a liberal salary but with the latter, the editorial board, it has for years been a labor of love and devotion, with honor to be sure but without pay. The work of the managing editor, Mr. Crownhart, is arduous and exceedingly well done as far as lay activities are concerned. No doubt, he occasionally is hard pressed for want of scientific material and editorials for a full edition of the Journal. The work of the board is equally difficult. It is asked to pass on the merits of papers presented for publication, to read them, reject or accept them, to trim and correct them, if need be, before they are ready for the printer. The responsibility is great, often of a delicate nature and a difficult job even if it were paid for, which it is not.

As a consequence, and from a layman's point of view, the Journal bears the earmarks of an excellent publication, as an organization journal. From a scientific viewpoint and from the attitude that the Journal should stimulate and inspire its readers to further study of and continued interest in medicine as well as from the elevated forum of medicine as an art, it lacks cohesiveness, sometimes altitude, character, inspiration and humanity.

The etiology of the Journal's ailings in our opinion must be recognized as a deficiency syndrome, a lack of internal secretion and of hormones such as cannot even be furnished by the very excellent brain of our lay secretary but can only be supplied by the inspired and active brain of an enthused medical man, a man similar to Sir Samuel Garth, of whom it has been said, "No physician knew his art more, nor his trade less."

As for the treatment of the disease afflicting our Journal, I would urge employing, as Scientific Editor-in-Chief, a physician, a paid part time responsible editor who will relieve our Secretary, George Crownhart, of duties and thoughts of necessity foreign to him. The exact qualifications and duties of such an editor, as I have in mind, I shall elucidate in a future communication. For the benefit of the Journal and of the State Medical Society of Wisconsin, it is time that the common slogan so frequently heard applied to George be stopped. As far as the scientific part of editorial management of the Journal is concerned, I must answer the query "Shall we let George do it and can he?" by a decided "No."

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SOCIETY PROCEEDINGS

ASHLAND-BAYFIELD-IRON

Nearly full membership of the Ashland-Bayfield-Iron County Medical Society attended the meeting at the Elks' Club on Thursday, March 7th. Dr. Wm. S. Middleton, Wisconsin General Hospital, Madison, gave a very instructive talk, taking "Edema" as his subject. He emphasized the pathological classes and therapeutic measures suitable for each. *M. L. Y.*

BROWN-KEWAUNEE

The Brown-Kewaunee County Medical Society held its monthly meeting at the Northland Hotel, Green Bay, on February 26th. Drs. Kersten, Levitas, Kispert and McNevins presented some very unusual and interesting case reports. From five to six o'clock Dr. Otto Foerster, Milwaukee, presented a skin clinic. Following the clinic a turkey dinner was served. The remainder of the evening was taken up by Dr. Foerster in the discussion of skin lesions and treatment, illustrated by lantern slides.

Thirty-eight members were present. By order of President McNevins all business of the society was suspended due to the extensive program. *M. H. F.*

DOUGLAS

The members of the Douglas County Medical Society met at the Androy Hotel, Superior, on Wednesday evening, March 6th. Dr. W. S. Middleton, Medical School, University of Wisconsin, addressed the members on "The Significance and Treatment of Edema."

A regular business meeting was conducted and much discussion took place with reference to just what aid the physicians would be able to give the Parent-Teachers' council, which is sponsoring a movement to provide free medical treatment to over 300 children in the public and parochial schools of Superior, whose parents can not afford to pay for medical attention which they require. Drs. R. C. Smith, T. J. O'Leary and H. A. Sincock, were appointed to serve as a committee to work out a plan of investigation and report to the society. *J. W. McG.*

EAU CLAIRE & ASSOCIATED

The Eau Claire and Associated Counties Medical Society held a meeting on February 25th at the Hotel Eau Claire. The program consisted of a talk by Dr. L. E. Daugherty of St. Paul, Minn., on "The Surgical Treatment of Pulmonary Tuberculosis." Discussion by Dr. Christian Midelfart and Dr. George W. Beebe. Dr. D. S. Sharp, Eau Claire, presented a paper on "Therapeutic Fads." Dinner was served at six-thirty. *E. E. T.*

FOND DU LAC

The regular monthly meeting of the Fond du Lac County Medical Society was held on the 13th at Hotel Retlaw. Dr. Phillips F. Greene, University of Wisconsin, spoke on "Chinese Medicine." The society also discussed health examinations and the Fond du Lac isolation hospital. A dinner preceded the business meeting. *H. R. S.*

LA CROSSE

The La Crosse County Medical Society met on February 19th at Pioneer Hall when Dr. John W. Harris, of the University Hospital, Madison, gave an interesting paper on "The Present Status of the Problem of Puerperal Infection."

The meeting was well attended and it was voted to have a joint dinner on March 19th, of the physicians and dentists of La Cross County. *J. E. H.*

LANGLADE

A talk on "Plastic Surgery" by Dr. G. V. I. Brown, Milwaukee, featured the regular monthly meeting of the Langlade County Medical Society at the Butterfield Hotel, Antigo, on March 6th. Dr. Brown showed how facial features such as harelip, cleft palate, scars from burns and other distortions were corrected. An interesting discussion followed the lecture. *J. C. W.*

MILWAUKEE

The Medical Society of Milwaukee County met on March 12th, at the Medical Arts Building. Dr. John R. Davis, of Toledo, Ohio, spoke on "Old Ideas Newly Applied in Most of the Common Fractures." This was illustrated by lantern slides.

The society met again on March 26th when Dr. Walter Alvarez, The Mayo Clinic, presented a paper on "Why Food Goes Down the Bowel," illustrating his talk with lantern slides. The Harvey film "The Story of the Discovery of the Circulation" was also shown. *E. L. T.*

OUTAGAMIE

Dr. Joseph L. Miller, member of the staff at St. Luke's Hospital, Chicago, and professor of medicine at the University of Chicago, spoke on "Chronic Arthritis" at a meeting of the Outagamie County Medical Society held at the Conway Hotel, Appleton, on March 8th. About forty physicians from the surrounding territory were in attendance. *C. D. N.*

ROCK

The Rock County Medical Society held its regular monthly meeting on Tuesday evening, February 26th, at the Beloit Municipal Hospital with dinner at six-thirty, followed by the business session and program.

Dr. Walter Nadler, department of internal medicine, Northwestern University Medical School, Chicago, spoke on "Blood Sugar Control in Diabetes." Dr. Don C. Sutton, also of the medical school, presented a paper on "Occlusion of the Coronary Arteries." Both papers were illustrated with lantern slides. *H. E. K.*

WAUKESHA

The Waukesha County Medical Society was entertained at the Avalon Hotel, Waukesha, on Wednesday, March 6th, with Dr. Margaret Caldwell as hostess. Covers were laid for 34 members. *J. F. W.*

WOOD

The members of the Wood County Medical Society met at the Charles Hotel, Marshfield, on March 7th. Dinner was served at six-thirty after which the program was presented in the library of the Marshfield Clinic. Dr. E. J. Ball, Nekoosa, spoke on "A Case of Lung Abscess with Reference to Medical Treatment"; Dr. Lyman A. Copps on "Indications for Bronchoscopy," with slides; Dr. James C. Sargent, Marquette University, Milwaukee, on "Urological Problems in General Practice." Through the courtesy of Dr. Carl Henry Davis, Milwaukee, four reels of film were shown on the subject of obstetrics. The films were as follows: Normal Labor, Forceps Delivery, Version and Breech Extraction and Cervical Type Caesarean Section. *W. G. S.*

UNIVERSITY OF WISCONSIN

The University of Wisconsin Medical Society held a joint meeting with the Phi Sigma Society on Tuesday, March 12th, at the biology building auditorium, Madison.

Dr. C. C. Little, recently resigned president of the University of Michigan, addressed the audience on "The Genetics of Cancer." Lantern slides illustrated his address. Dr. Little was the guest of honor at a dinner at the University Club before the lecture.

MILWAUKEE ACADEMY

The Milwaukee Academy of Medicine held its regular meeting on February 26th at the Medical Arts Building. A case report "Tumors of the Ampulla of Vater" was presented by Dr. Wm. M. Jermain. Dr. Benjamin J. Birk, spoke of observations at the medical clinics of Vienna during his recent visit. "The Vomiting of Blood; Its Significance and Clinical Management" was the subject of the address by Dr. Frank Smithies, Chicago.

The Academy met again on March 12th when Dr. Sidney J. Silbar presented "Para-Urethritis" illustrated by lantern slides. Dr. John R. Davis, Toledo, Ohio, spoke on "Old Ideas Newly Applied in Most of the Common Fractures." This was also accompanied by lantern slides.

D. E. W. W.

NEWS ITEMS AND PERSONALS

The valuable medical library of the late Dr. Horace Manchester Brown, Milwaukee, has been left to the Milwaukee Academy of Medicine and a resolution has been passed by the executive committee of the academy to raise at least $20,000 for an endowment fund to see that the books are properly housed.

There are books in the Brown library from 300 to 500 years old and books of which only one or two copies exist in the world. The academy will not get possession of the books for some weeks.

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Dr. Karl W. Doege, Marshfield, sailed on the North German Lloyd steamer "Berlin" for Berlin, Germany, on March 21st, to attend the annual meeting of the German Surgical society, of which he has been a member for several years. He will be gone six weeks and besides attending the meeting will visit hospitals in Heidelberg, Hildesheim, Frankfort and other places in that country.

Dr. J. W. Coon, medical director of River Pines sanatorium, Stevens Point, was elected president of the Wisconsin Hospital association at the annual meeting in Chicago, held the latter part of February. Dr. W. A. Henke, La Crosse, and Dr. R. C. Buerki, Madison, are among the members of the board of trustees of the organization.

The Wisconsin association voted to invite the Illinois association to meet with it at Milwaukee next year. The Minnesota association also will be invited.

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Dr. J. E. Donnell, formerly of Cuba City, will continue his studies abroad in the practice of surgery on the eye, ear, nose and throat. He departed the latter part of February for Paris where he spent several days before proceeding to Vienna.

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Dr. C. D. Boyd, Kaukauna, was in charge of a free chest clinic which was held recently by the Appleton Women's club.

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Drs. Joseph and James Dean, Madison, have purchased property on West Dayton and North Carroll streets and will take possession of it on June 9th. The buildings will be remodeled for clinic and office purposes.

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Dr. F. E. Kosanke, Fond du Lac, attended, during February, the mid-winter medical conference of homeopathic members of state medical boards and official representatives of homeopathic state and sectional societies held at the Palmer house, Chicago. Dr. Kosanke is secretary and treasurer of the Wisconsin Homeopathic Medical society.

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Dr. W. D. Stovall, Madison, spoke on "Advances in Science and Preventive Medicine" at the February meeting of the Professional Men's club of that city.

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Dr. A. R. Tormey, Madison, returned recently from a short vacation spent in Cuba.

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Discontinuance of the position of clinical director at the Milwaukee County Dispensary and creation of the position of assistant superintendent, with a salary of $6,500, was voted by the judiciary and finance committee of the Milwaukee County board.

Dr. Louis M. Warfield, present clinical director, does not care to take full time charge of the dispensary, as it would interfere with his private practice. A full time man is necessary as the county will take over the control of Emergency hospital of Milwaukee.

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The American Proctologic society will hold its annual meeting in Detroit on May 13th, 14th and 15th.

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Dr. G. N. Hidershide, Arcadia, pioneer Trempealeau county physician, is confined at the Winona hospital on account of a heart affliction. The doctor and his wife had planned to go south to spend the remainder of the winter but it is likely that they will have to give up their trip.

Dr. John S. Wier, a graduate of the school of medicine of Washington university of St. Louis, has become associated with the Fond du Lac clinic as obstetrician and gynecologist, according to a recent announcement by Dr. Henry E. Twohig, head of clinic.

Dr. Wier also studied at the Presbyterian hospital in Chicago for six months and for two years was a bacteriologist in the autopsy service of the Barnes and Children's hospitals at St. Louis.

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Dr. W. D. Stovall, director of the state hygienic laboratory, discussed thermometer technique before the ninth annual conference on maternity, child welfare, and public health nursing, sponsored by the State Board of Health during March. Dr. W. J. Miller, of La Valle, and Mr. J. G. Crownhart, secretary of the State Society, also spoke at the gathering.

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The Pember-Nuzum Clinic, Janesville, has announced the association of Dr. Guy C. Waufle with the clinic. He will do general practice work for a time, later specializing in surgery. Dr. Waufle is a graduate of the University of Illinois College of Medicine in 1903.

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Milwaukee's infant death rate reached a height last year that has alarmed the health department, and Dr. John Koehler, commissioner, plans to launch an intensive prenatal educational program among women of wards peopled largely by foreign-born. Death among infants less than a year old averaged seventy for every 1,000 births, not including stillbirths, Dr. Koehler says, in the latest department bulletin.

In all, there were 864 infant deaths during 1928 with 204 of the deaths occurring in the first twenty-four hours following birth. There were 166 deaths in the first seven days and 107 died from seven to thirty days after birth.

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Dr. H. M. Coleman and Dr. C. C. Post, with their wives, left Barron the latter part of February by auto on an extended trip through the east and south to be absent for some two months or more. The doctors have been associated since 1901 and this is the first time they have been able to make an extended trip together during the past twenty-eight years. Dr. H. H. Schlomovitz, who is a member of the clinic will be assisted by Dr. E. Johnson of Duluth in the practice of the firm while the doctors are absent.

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Danger to the water of many Wisconsin households is seen by state health officials as a result of spring floods which are forecast as soon due. There are estimated to be 300,000 private wells in the state. A large number are situated in low places which would receive flood waters from swollen streams. It is declared that only a high type of construction and exercise of precautions will prevent entrance of surface pollution once the high water surrounds them.

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Appointment of Dr. C. C. Stein, graduate of the University of Illinois with the class of 1927, as assistant to Dr. M. D. Cottingham, director of the medical department of the Kohler Company, of Kohler, was announced recently by Dr. Cottingham. Dr. Stein, who assumed his new duties immediately, comes to Kohler from St. Luke's hospital in Chicago, where he spent two years following his graduation, the first as an interne and the second in advanced training.

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Dr. Douglas Bell, son of Dr. A. R. Bell, of Tomah, sailed on February 14th for Honolulu where he will practice medicine in the future.

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Dr. A. J. Boner, has moved to larger quarters in the New Levitan Bldg., Madison, from the Commercial National Bank Bldg. For several years, Dr. Boner has been associated with various hospitals in Madison.

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Dr. Charles A. Doan, formerly of New York City, will become associated with Dr. L. L. Taylor and Dr. F. H. Ferguson at the Waupun Clinic the latter part of April or first part of May. Dr. Doan specializes in diseases of the eye, ear, nose and throat.

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Few persons fear death, but all fear incapacity, Dr. D. W. Roberts, chairman of the Milwaukee Civitan club's health committee, told fellow workers recently at the Athletic Club. He urged men between twenty and fifty to protect their families by guarding their health through physical examinations.

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Dr. H. E. Fillbach, Hazel Green, has purchased a residence in that city for the purpose of converting it into a hospital. Dr. Fillbach formerly practiced at Montfort before coming to Hazel Green three years ago. He is a nephew of Dr. Wilson Cunningham of Platteville.

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"The study of energy and matter teaches us that we cannot get something out of nothing," Dr. John F. Schneider, Oshkosh, stated in an address entitled "The Unseen Environment" at a recent noon luncheon at the Athearn hotel.

Dr. Schneider pointed out that the three states matter can assume are liquid, solid and gas. Energy in the form of heat produces the change from one state to another, he said.

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Dr. John P. Koehler, Milwaukee commissioner of health, announced recently the active staff of Emergency hospital for 1929 which will include seven additional physicians and surgeons. Additions were made upon recommendation of consulting staff and advisory board of the institution. The new physicians are: Drs. W. L. MacKedon, R. M. Stark, W. J. McKillip, Ralph Sproule, Thomas F. McCormick, A. J. Taugher and M. G. Peterman.

Dr. A. V. de Neveu, medical director of the hospital, reported to Dr. Koehler the hospital is now served by a completely organized medical and surgical section and able to meet any emergency service demanded by the city. A corps of four resident physicians working in eight-hour shifts provides prompt attention at any hour in the twenty-four.

Dr. Philip R. Fox, a dean of the Dane county medical profession, was eighty-nine years old on March 27th. Dr. Fox retired from active practice about a decade ago.

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"The Relation of Child Training to Proper Nutrition," was the subject of Dr. Homer M. Carter in a talk before the Pre-school and Kindergarten club of Green Bay.

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Dr. R. N. Nelson, Horicon, left on the 30th of March for St. Louis, Mo., where he will spend the month of April taking a post-graduate course in pediatrics under Dr. McKim Marriott.

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The care of mothers and new-born babies, was included in an address by Dr. W. W. Bauer, Racine, before the Daughters of the American Revolution recently. Dr. Bauer stated that the United States stands 18th from the top of the list, as far as deaths are concerned, directly or indirectly connected with child birth and 17 nations, some of which are looked down upon as uncivilized surpass the United States so far as the care of mothers and babies is concerned.

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Citing and explaining the five classes generally accepted in the medical world as those to which children who suffer from lack of appetite, belong, Dr. G. J. Schwartz, Kenosha Clinic, Kenosha, told Kenosha mothers recently important facts concerning "The Child Who Does Not Eat." Physical defects, mental conditions, lack of home control, and lack of sleep, were given as some of the reasons for lack of appetite in youngsters.

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Dr. S. Plahner, Milwaukee, addressed the monthly meeting of the Parent Teachers Association of the Lincoln High School, Milwaukee, on Monday, March 11th. The subject was "The Problem Child."

DEATHS

Dr. Frank Gregory, Valders, died at Tacoma, Wash., Friday afternoon, March 8th. Born in Canada in 1850, Dr. Gregory came to this country and started the practice of medicine in northern Michigan. He and his family later moved to Marinette where he practiced for many years before coming to Valders. His active life and the many demands made upon him tended to weaken him, but unmindful of his own condition he continued his practice until he was forced to retire about a year ago.

The deceased was a member of the Manitowoc County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. He is survived by two daughters and two sons.

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Dr. Forest C. Nichols, Wausau, died on March 12th, following a year's illness with chronic nephritis. Dr. Nichols was born at Burlington, Ill., January 17, 1868, and graduated from Rush Medical College, Chicago, in the year 1894. He was licensed in the state of Wisconsin in 1903.

The doctor was a member of the Marathon County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. Surviving him are his wife and a son.

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Dr. C. D. Powers, Hancock, died suddenly from a heart affliction on February 22nd. The deceased was born in 1861 and was a graduate of Marquette University School of Medicine in 1913. He was licensed in the state the same year, and practiced medicine at Arpin and Kingston before coming to Hancock.

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Dr. William Frederick Beutler, Wauwatosa, died in Taos, N. M., on March 8th. With his son, Floyd, Dr. Beutler left Wauwatosa but a few weeks ago, following the death of his wife. He was to have spent a month of rest in New Mexico before returning home. The doctor was born in 1865 and graduated from Niagara University Medical School in 1891. He was licensed in the state of Wisconsin in 1903 and became assistant superintendent of the institution for chronic insane at Wauwatosa. Five years later he was made superintendent and served in that capacity for many years.

Dr. Beutler was a member of the Milwaukee County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. Besides his son, one sister and two brothers survive.

MARRIAGES

Dr. Walter Putnam Blount, Milwaukee, to Miss Frances Hoben, daughter of President Allan Hoben of Kalamazoo college, at London, England, the latter part of February.

SOCIETY RECORDS

New Members

Purdy, F. P., Mukwanago.
Treadwell, C. L., Siren.
Irwin, Robert H., Lodi.
Fichman, A. M., Stevens Point.
Irwin, G. H., Lodi.
Zimmerman, F. H., Columbus.
Fredrick, H. Y., Westfield.
Ohswaldt, H. F., Oconto Falls.
Browne, C. F., Racine.
Mayfield, A. L., Kenosha.
Emery, M. T., Kenosha.
Conover, J. L., Wauzeka.
Carberry, E. A., 150 Woodland Ave., San Francisco, California.
Herschensohn, H. L., 2530 Hadley St., Milwaukee.
Long, C. W., 141 E. Wisconsin Ave., Milwaukee.
MacInnis, Florence E., 558 Jefferson St., Milwaukee.
Nebel, Harold, 210 E. Wisconsin Ave., Milwaukee.
Schlomovitz, E. H., 200 Lyon St., Milwaukee.
Schulz, I. 1044 Teutonia Ave., Milwaukee.
Wigard, David, 2031 State St., Milwaukee.
Banyai, A. L., Muirdale Sanatorium, Wauwatosa.
May, J. H., Maribel.
Millard, A. L., Marshfield.

Changes in Address

Domine, A. Z., Milwaukee, to Taylor.

Spencer, C. F., Denver, Colo., to 163 Howard St., Spokane, Washington.

Hildebrand, G. J., Albuquerque, N. M., to 1836 North 7th St., Sheboygan.

CORRESPONDENCE

FROM ILLINOIS

Illinois State Medical Society
Monmouth, Illinois,
March 15, 1929.

To the State Medical Societies' Secretaries.
Gentlemen:

At a meeting of the Council of the Illinois State Medical Society held in Chicago a few days ago, the enclosed resolution was unanimously approved and I am herewith sending you a copy of the same according to the instructions embodied in the resolution.

Our Society has opposed all legislation of the Sheppard-Towner and Newton Bill types and at a meeting and at the hearing held recently in Washington, we were represented by the Chairman of our Council, Doctor William D. Chapman, who appeared as an opponent to the Newton Bill.

We believe that much credit is due to the executive secretary of the Bureau of Legal Medicine of the American Medical Association, Doctor William C. Woodward, who in his usual diplomatic and thorough manner met the arguments advanced by the proponents of the bill.

It is the opinion of our Society that medical problems should be met by those who have had a thorough medical training and should not be in any way supervised by laymen.

Yours very cordially,
H. M. CAMP,
Secretary Illinois State Medical Society.

WHEREAS: bills have been recently introduced in our Fedaral Congress at Washington to continue in some form of Government aid and supervision over Maternity and Infant Welfare in our various states, and

WHEREAS, The Illinois State Medical Society has repeatedly opposed such forms of Legislation, whether requiring or not requiring a matching of the Government appropriations by the various states, and

WHEREAS: these bills in each instance have placed the supervision of such Federal controlled or Federal supervised proposals in the hands of the Children's Bureau of the Department of Labor, and

WHEREAS: at a recent hearing on the Newton Bill before the committee in Washington, the Illinois State Medical Society was represented by the Chairman of the Council who spoke in opposition to the Bill, and

WHERAS: prominent representatives of other Medical Societies were present and appeared as proponents of the Bill, therefore be it

RESOLVED, that the Illinois State Medical Society, through its Council in assembly this 11th day of March, 1929, again go on record as opposing legislation of this type, which has been opposed by the American Medical Association, and be it further

RESOLVED that the Secretary be instructed to send a copy of this action to the Secretary of all State Medical Societies or Associations which are component Societies of the American Medical Association and also to the Director of the Bureau of Legal Medicine of the American Medical Association, Doctor William C. Woodward who also appeared at the hearing in Washington and so admirably led in the opposition of the Newton Bill.

Assemblyman E. G. Smith, Beloit, is the author of a bill providing an appropriation of $500,000 for the establishment of a hospital for crippled children at the University. Authorities at the institution have made no request for this appropriation from the legislature.

* * *

The senate killed the bill which would have prohibited itinerant doctors in the state. It was pointed out that it was impossible to cancel the licenses of these itinerants and that the service rendered to the public was questionable and probably of no real value. Nevertheless many newspapers of the state put on a campaign to kill the bill on the ground that publishers would lose the advertising that now comes from the itinerant practitioner.

* * *

The senate has voted favorably on the bill which will compel physicians in the state to have only a federal license for the prescribing of liquors as medicine. Now a state license is also demanded. But it is pointed out that the state license serves no public purpose. The bill will reach the assembly, if finally passed by the senate, for action sometime in April.

* * *

Since the state of Wisconsin collected no taxes other than the common school fund income mill tax between 1923 and 1926, county treasurers cannot demand a refund on compromised bank stock taxes for those years, the attorney general ruled.

* * *

In a letter to the Eau Claire county treasurer, the attorney general pointed out that the recent Fond du Lac county case in which the supreme court held that the county treasurer had to pay a share of the bank stock tax, does not apply to the state treasurer, since he was not a party to the action, and therefore is not bound by the decision.

* * *

Another victory was won by the farmer members of the legislature, when they secured favorably advancement of the Sullivan bill for more nutritious ice cream. The present law provides that cream used in the manufacture of ice cream must contain 12 per cent of butter fat. The Sullivan bill increases this to 14 per cent. Sullivan claims this will provide a larger market for the milk of the farms. Assemblyman Larson, Neenah, believes that the use of richer cream will increase the price of the ice cream cone and curtail the use of the

farmers' milk. Fewer cones would be bought.

"If any farmer invited company to his home and offered his guests home-made ice cream of only 12 per cent butter fat, he would never be bothered by these visitors again," declared Assemblyman Wallace Ingalls, Racine. "I am for better ice cream."

* * *

Wisconsin may adopt the Pennsylvania system of regulation of the sale of "oleo" in the state so as to increase the use of butter. Assemblyman O. S. Loomis, Mauston, is the author of a plan that asks a license fee of from $1,000 for a manufacturer that makes the product to $10 for the boarding house that serves the butter substitute.

For years farmer members of the legislature have been attempting to enact some legislation that would check the supply of "oleo" coming into the state. Sold in competition with butter, every pound of "oleo" purchased means that much less butter used. The sales tax plan suggested in the Hall bill has been found so objectionable that Assemblyman Loomis has offered the license fee system, which has recently been sustained by the courts of Pennsylvania.

* * *

Stringent measures are urged by Assemblyman L. L. Thayer, Birchwood, to prevent hunting and fishing from becoming a sport only for the rich. Assemblyman Thayer is planning a measure to provide that any grounds posted against the trespass, hunting or fishing would also be closed to the owners of the land as far as hunting or fishing was concerned.

* * *

With the wide difference of opinion over an increase in gasoline taxes in the legislature the question remains one of the largest unsolved problems still to be met. There is much feeling in the legislature that gasoline taxes should be increased to four cents. But there the unanimity of opinion ends. The big difference comes between the advocates of spending the money primarily for a through road system and those that feel that the first consideration should be to relieve localities of road building burdens.

* * *

Wisconsin's highway program must be financed by the license fee and the fuel tax, Walter Buetow, state highway engineer, declared in a talk before the Engineering Society of Wisconsin here. The pay-as-you-go policy, which is written into the state's constitution received a rap from the speaker who quoted Thomas H. McDonald, chief of the federal bureau of public roads, as saying, "you pay but you don't go." The only true pay-as-you-go plan is the bond plan, he said.

* * *

Duck hunters will have a shortened hunting day next year, it was indicated before the senate committee on state and local government with overwhelming sentiment indicated for closing the duck hunting season in the afternoon. Senator George Blanchard, Edgerton, was given a hearing on his bill providing that duck hunting be ended at 4 o'clock in the afternoon. Several members of the committee express the belief that the duck hunting day should be closed at 1 o'clock to give the birds a rest.

Installation in the chemistry department in the University of Wisconsin of a micro-balance which is almost sensitive enough to measure the weight of an idea extends the equipment of the micro-analytical laboratory here to a point of efficiency unsurpassed elsewhere in the United States, and equalled in only five or six other institutions, according to Dr. V. M. Meloche, in charge of the laboratory.

The Ainsworth balance just installed is superior to any balance in the present equipment of the laboratory and its installation was necessary because of the greater care required for analytical work with minutely small specimens. The balance is sensitive to a weight of .001 miligram, having a capacity for 20 grams. The beam of the scale is five inches long with 500 graduations on a bar above the beam.

* * *

Wisconsin dogs will save their ears but continue to lose their tails if a bill introduced in the assembly by Assemblyman Albert J. Baker, Mount Horeb, is enacted into law. The bill was offered at the request of the state humane agent. It strictly prohibits the cropping of ears but fails to mention anything about tails.

* * *

The assembly, after passing the Stephens bill which would have required all tourist rooming houses to get a state license, had a decided change of sentimnet, reconsidered the bill and killed it, 60 to 16. The bill had the backing of the state board of health.

* * *

There is little likelihood that the state will buy any state parks at the present legislative session. Northern Lakes Park and Kettle Moraine Park are the two biggest park projects being considered. These and others are expected to die because of failure to reach an agreement as to how the money should be raised. Both of the big bills carry surtax provisions which are opposed by Gov. Walter J. Kohler and the Wisconsin Manufacturers Association. Farmers won't stand for an increase in property taxes.

* * *

That the legislature has the right to give broad powers to counties in the purchase of delinquent taxes was the decision of the supreme court in sustaining the validity of the law enacted by the recent session of the legislature. A large number of counties of the state have already passed ordinances directing the county treasurer to purchase delinquent taxes. The validity of an ordinance passed by the county board of Columbia county was challenged as being unconstitutional. In many of the counties individuals purchase delinquent taxes and reap a harvest by the large interest rate allowed. It was to meet this situation that the legislaure enacted a law giving counties the power to purchase these taxes. Justice Crownhart in the opinion of the court analyzed the different constitutional provisions and held that the law was valid.

* * *

Appointment of Edward L. Kelley, Manitowoc, as a member of the state tax commission was confirmed by the senate 24 to 6, the second appointment by Gov. Walter J. Kohler to meet the upper house's approval.

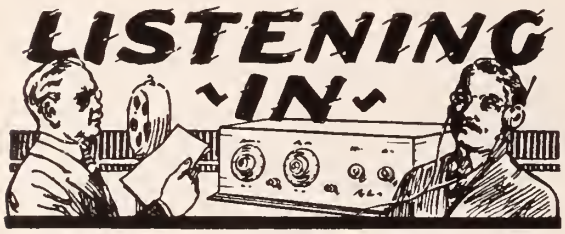
Enactment of a $1 resident fishing license fee on all anglers over 18 years of age was urged by Senator George Blanchard, Edgerton, before the senate committee on state and local government. A fishing license is now required in the state only from people from outside the state. Senator Blanchard estimated that his bill would raise $300,000 a year to be placed in the conservation fund.

* * *

The city of Madison lost in its claim that it had the right to tax the property of the university co-op store. The university regents entered into a deal with the co-op management, under which the university was given the co-op property under the condition that the store company could occupy the premises for thirty years. Due to the fact that the property is now in the name of the unversity, it is not taxed and it was estimated that the company, through tax exemption, makes much more than the value of the property. The court upheld the transaction and the agreement between the university and the company stands.

* * *

The supreme court has knocked out the Milwaukee city ordinance which provides that every dealer in soda water and other soft drinks must have a city license. The high court in this case sustained the decision by Municipal Judge George Shaughnessy, under which Martin Meyer, a grocer, was found not guilty. The dleton, Wisconsin General Hospital, Madison, gave a that the court was unable to find a valid reason for the ordinance, which has been in force since 1926.



JUST A JOKE

An illustration of how little it takes to inspire a malpractice case came to the attention of the secretary during March. A patient was complaining in a public place of what a hard time he had had and a physician friend present jokingly made a remark to terminate the conversation. The joke was taken seriously and came very nearly being the cause of another malpractice case.

THE COUNTY NURSE

In speaking before public health nurses at Madison in March, many told the writer afterwards that they would appreciate the opportunity to work with an advisory committee of the county medical society and to have the opportunity of visiting an occasional meeting to explain the work and secure constructive criticisms. This opportunity for closer cooperation should not be overlooked.

SHEPPARD-TOWNER ACT

Several members have asked as to the present status of the Sheppard-Towner act. This act will expire in June of the present year. While proponents of its extension have advocated two bills before Congress, both died without action when Congress adjourned on March 4th. It is anticipated that an extension measure will be reintroduced in Congress when it again meets.

APPRECIATED

As the secretary has visited in the corridors of the state capitol, several members of the legislature have told him that they appreciated receiving letters from the physicians they knew at home indicating the good points or defects in proposed legislation affecting physicians and the public health. Each said that such letters gave them information that they could not otherwise obtain and came from a source where they knew they could rely upon the facts as stated in the letters.

THE PRESS SERVICE

During the past few weeks several weekly papers have forwarded copies to the secretary's office in which the weekly health story of the State Medical Society was featured on the front page. This service is now used by the great majority of the weekly and daily papers in this state and, through the Minnesota State Medical Association, is furnished to the press of Minnesota.

Senate Advances Permit Bill; Chiropodists Ask Authority to Do Surgery; Optometrists Would Exclude Glasses in Stores

By a vote of 14 to 3, the Senate during March advanced the Mehigan bill 162-S which would relieve physicians from the necessity of procuring an annual state permit at a cost of $10 under the state prohibition act. Before advancement the bill was amended to include druggists and the amended bill was then sent to the Joint Commitee on Finance, where it was to have a hearing just as this issue was sent to the printer.

On April 10th, the Senate is to decide whether they will approve the request of Wisconsin chiropodists for the right to do surgery, except amputations, as provided in bill 181-S. The measure was recommended for passage by a divided committee vote after three hearings had been given to the measure. The committee chairman dissented from the committee report and a close vote is anticipated when the Senate as a whole votes on the measure.

As the Journal goes to press, the last few days in March, several other measures affecting the public health were to have a hearing before committees. In bill 483-A, the optometrists ask that stores be prohibited from the sale of glasses for the correction of vision unless a registered op-

SOME, NOT ALL

Senator Cashman has warned the medical profession in the state that if doctors in the cities refuse to respond to sick calls from rural districts he will seek special legislation to have their licenses revoked.

In all justice to the doctors and rural folk alike we're wondering whether there isn't some misunderstanding in the matter.

While it may be that there are some physicians in the cities who would refuse to make a call in the rural zones under any conditions, they are the exception, not the rule.

Doctors, of necessity, must endeavor to maintain certain office hours and limitations on the extent of their field of practice if they would serve their patients to the best of their ability. But even so, there are few physicians who will not respond to the call of suffering humanity no matter when and from what source received.

Senator Cashman says that the patient in the country can not always go to the city for medical aid. That's true. But neither can the doctor always get to the rural patient.

During the recent snow blockades it seems a rather significant fact that the only travelers over some of the blocked highways were the doctors. They got through where mail men, even farmers, could not, doing so in response to the call of the afflicted. Let's consider those instances before condemning the medical men as a whole because of the acts of a few.

Furthermore, it is a recognized fact that the number of country practitioners is steadily decreasing. The rural neighborhood doctor has moved to the city where facilities for the proper treatment of patients in the way of hospitalization and so on are not lacking. His move in this respect has been the result of the natural trend of rural folk to the urban communities in quest of medical service because of the added advantages the latter provide. And what's more natural than that the doctor should follow his patients in this respect?

This change has been due principally to the steady improvement of transportation conditions, especially the use of the motor car. And it's when such transportation is lacking or impeded that some of the cases of which Senator Cashman says he has heard have probably occurred.

There are some doctors who will not respond to an ordinary sick call in the country, but even so when such calls are received they usually see to it that the summons is responded to by some other member of their profession without delay. But all of them, if the emergency warrants, will be found answering the call for aid from suffering humanity no matter how great the sacrifices they must make themselves.

Editorial, Fond du Lac Commonwealth-Reporter.

tometrist is in charge of the sale. The measure would also prohibit all sale of glasses by peddlers, even though they be registered optometrists.

The Wisconsin Association for the Disabled was to be heard on a measure to appropriate $500,000 for a special hospital to be erected and conducted by the University for the care of crippled children. The plan of operation would follow that of the Wisconsin General Hospital.

Despite the endorsement of the State Board of Health and the State Medical Society, the Senate in March refused to pass a bill aimed to prevent the itinerant practice of medicine. The existing statute requiring an annual license of $250 will be continued.

Hearing was also to be had the last few days in March on the Mulder bill, 247-A, carrying an appropriation of $5,000 a year for a two-year period to the Board of Medical Examiners for the purpose of permitting the board to employ a full time investigator in their work in weeding out gross cases of quackery. If the bill is commended by the Public Welfare Committee of the Assembly, it will then be before the Assembly for a vote of advancement after which it will be referred to the Joint Committee on Finance.

CITY PHYSICIANS ATTACKED

Declaring that city physicians were refusing to answer rural calls, Senator John E. Cashman of Denmark, representing Door and Kewaunee counties, opened an attack on physicians during the course of the debate on the itinerant practice of medicine. Senator Cashman, who has opposed other measures suggested by the State Medical Society, declared:

"I received a letter yesterday from a member of the county board of Door county, complaining bitterly that physicians located in the cities up there had refused to make calls in the country, all except one. The roads were open for use of sleighs, but not automobiles, and they refused to make sick calls.

"I note the representative of the physicians is here. I am glad that he is in the chamber to hear me say that unless the physicians take care of the sick people and forget their own comfort, I will introduce a bill to forbid them to practice at all. We are willing to help these gentlemen, but they are all moving into the city and for some reason or other disappearing from the country, and sick people can not always be brought in.

"Those physicians who regard their own comfort so much want service, but don't do their part."

LEAD POISONING FROM WINE

The case of lead poisoning, reported by Millard Knowlton, Hartford, Conn. (*Journal A. M. A.*, Dec. 15, 1928), is of interest for the following reasons: (1) Lead was apparently conveyed to the patient through wine. (2) A relatively small amount of lead was required to produce symptoms. (3) An associated acute appendicitis was discovered on exploratory incision for a suspected gastric ulcer with perforation.

Using the Lawyer to Help the Doctor Thaw Out Frozen Accounts

How the Doctor May Use the Lawyer without Going to Law

By ROBERT R. AURNER, A. M., Ph. D.
Professor, Department of Business Administration, School of Commerce
University of Wisconsin, Madison

Until recently members of the medical profession have felt that legal methods of collection are not feasible because of the nature of the publicity attendant upon a suit in court.

Such an assumption overlooks the fact that much effective work may be done with the delinquent before the matter approaches within hailing distance of the court of law.

In this article, the third of a series in The Wisconsin Medical Journal* on "Making It Easier to Collect the Doctor's Bills," it is my object to present some methods by which the lawyer may be used to help the doctor thaw out frozen accounts, and to demonstrate how the doctor may use the lawyer without going to law.

THE MILDER METHODS ALWAYS PREFERABLE

In recommending the occasional use of the lawyer, it is not intended in any sense to suggest harsh treatment. For as one clinic manager of long experience has put it, "The longer I am in this business of collecting money from patients, the gentler my collection methods become. I find it pays."

It must be admitted at once that the policy of leniency is most valuable in the end. Ill-will cuts down the community reputation and has an injurious effect upon the long-run income of either individual or organization. Threatening procedure is seldom worth the candle. It is likely to alienate more prospects than it collects money. It does not square well with medical ethics, nor does it hold fellowship with the humanitarian spirit that hovers over the profession. The better treatment is a thorough education of the patient in the credit obligation at the time of incoming and at the time of outgo and regularly thereafter, with proportionately increasing pressure through the letter, the reminder, the sticker, the card or the slip.

And yet there is such a thing as being too lenient. A doctor puts a large investment in his education. In his office and equipment he carries a sizable overhead. Like the clinic, of which he often becomes a part, he must, if he is to continue to exist in the community, be paid reasonably for his services. And yet I know of a certain clinic in the middle west which at this writing is running an annual loss of $2400.00 a year in interest. Capitalize this amount at six per cent and you have something like $40,000.00 in outstanding billings, virtually non-collectible, admittedly frozen tight. It is at this point, it seems to me, that the doctor may call upon the services of the lawyer without going to law.

PROFESSIONAL SERVICE COLLECTIONS—HOW TO USE THE LAWYER*

The ultimate service which the lawyer performs in professional service collection is to persuade the court of the justice of the doctor's claim against his patient, and to obtain the aid of the court in enforcing its collection. He is the medium through which the medical man employs the processes of the law to enforce the payment of his claims. His service is purely legal and is of no interest to the doctor. Once the claim has gone to suit it is no longer a collection, and cannot be dealt with as such. The lawyer's duty then is to push the suit for the fee as expeditiously as may be, and with as little loss of the time of the doctor as he can manage; for the doctor must, of course, testify in his own behalf.

The lawyer fills, however, an important and useful place in aiding in the collection of the doctor's fees *before going to suit.* It is this side of the lawyer's service that I desire to emphasize.

There is a psychological factor involved in the handling of a collection account by the lawyer. The average layman, uninitiated in the professional mysteries, stands perhaps just a little in awe of the law, however small respect he may seem to have for legislative enactments. Certain it is that people do not like to have their private affairs dragged into the open and broadcasted from the witness stand in a court room, and will go to great lengths to avoid it, even to paying up the claim. A collection agency has been known to dun a patient for six months without tangible results; the same dunning letter, written under an

* See the February and March issues for previous articles by the same author.

* For much of the information in the following paragraphs I am indebted to my good friend, Mr. James H. Van Wagenen, of the law firm of McGovern, Lyons, Curtis, Devos and Reiss, Milwaukee. Mr. Van Wagenen has made a close study of the possibilities of co-operation along the lines I have suggested, and I am glad to have this means of expressing my appreciation for his expert legal opinion.

attorney's name and on his stationery, has brought the debtor hurrying into his office to avoid any further contact with the law. Nor did the attorney have to threaten suit to accomplish the result.

One physician has his attorney write his slow-paying patients at their places of business, especially when they work with a number of men. When the delinquent finds letters, bearing an attorney's letterhead, waiting on his desk every morning, where his stenographer and his associates in the office may see them and wonder about them, he usually begins to think about paying his account. About a letter from an attorney there is something arresting that cannot be long ignored. Such letters need not be mandatory in their nature; a simple statement of the legal retainer, and of the claim involved with a suggestion that the debtor call at the office of the attorney and arrange for payment, is usually sufficient. The threat, if any, is implied, but none the less effective.

Another advantage incident to the collection of accounts like these, short of actual suit, is that the lawyer's charges are frequently less than those of a collection service. There are a number of reasons why this is true. Many lawyers are glad to handle for a nominal sum a physician's collections as "feeders." Small items like these are not infrequently productive of larger and more important litigation. This is on the theory that if the doctor has more important legal business he will bring it to the attorney with whom he customarily deals. In addition, doctors are in a better position to throw business to a lawyer than is the average man, not only because of the confidence so deservedly placed in a doctor's opinion, but also because physicians are more often in contact with situations involving legal redress and requiring legal services of a nature that can be rendered only by a lawyer. The doctor, treating the victims of all kinds of accidents, coming in contact with anyone who is injured in mind or body through the carelessness or recklessness of another, may call his attorney's attention to the situation, to the advantage of both patient and attorney.

For these reasons physician's accounts are sought after by lawyers interested in developing a practice; and because they are desirable, such accounts are not infrequently handled at cost to the attorney, or for a nominal sum. An attorney cannot ordinarily realize enough on the time he puts into collecting a doctor's accounts to show a profit for his work, but he is, nevertheless, glad to handle them for the benefit of the good will involved. Incidentally, he is often enabled to benefit the physician by qualifying him as an expert and using his testimony in court. The physician's fee for such work is rather generous, and the loss of time involved very small. Few personal injuries are susceptible of proof without the doctor's testimony. The association between the professions may thus be mutually beneficial.

If the lawyer expects to keep the doctor as a client, *he must collect as much as possible with as little offense to the patient-creditor as possible.* A lawyer realizes that he cannot keep the doctor's legal custom if his vigor in collecting the claims offends the client to the extent of his going to another doctor. This is one of the reasons, of course, why doctors dislike to resort to legal means to collect.

The loss of patients through overzealous collection methods can be avoided by the use of tact and ordinary consideration with a proper admixture of firmness and patience. Such procedure takes time. The doctor's logical step, therefore, when his own facilities are exhausted, is to put his collections into the hands of an attorney able to devote the necessary time to diplomatic means of soliciting payment. Claims of physicians for professional services are peculiarly easy to try in court. No profound knowledge of law is required, simply a familiarity with methods of legal procedure. Moreover, courts are markedly sympathetic to such claims, owing, in part, perhaps, to the bond existing between professional men.

For the reasons just enumerated, claims for doctor's services may advantageously be handled by young attorneys not yet subject to the press of more lucrative legal business. They have sufficient familiarity with legal procedure to handle the case. But more than that, these young men have, from the nature of their status in their profession, something even more important to physicians: plenty of time to handle such cases in a tactful manner. More than that, these earnest young men, anxious to do well and to please, will give the physician's case the energy and close attention it deserves. It is necessary that the doctor make clear at the beginning of the proceedings that tactful, inoffensive means are to be employed, that final legal steps are to be taken only rarely and under no circumstances until the case has been carefully considered, and final permission given

to go ahead. Once the lawyer understands these desired restrictions, he knows how to proceed.

There is a further advantage to the doctor in the employment of the young attorney in that his fee for services will be less than that of the older practitioner, and ordinarily less than that of the collection agency. Only in very small cases will his fee exceed five or ten percent of the amount collected. The fees in justice court cases, (in which class most physicians' claims fall,) or in the instance of Milwaukee County, for example, civil court cases, are set by statute at five per cent of the amount collected, with a minimum of five dollars and a maximum of twenty-five dollars. The minimum, however, lies in the discretion of the attorney, and he may lower it.

There is considerable evidence to indicate that the physician's accounts are more effectively collected by attorney than by collection agency. It is probably undeniable that the association is a more dignified one, and is more conducive to the maintenance of the ethical standards of the medical profession. The opinion may be hazarded that the average debtor would rather have the attorney collect the debt he owes his doctor, short of actual suit, than be pressed by a collection agency. By virtue of this attitude he may be inclined to be more willing to continue as a patient of the physician for whom the attorney acts. The psychological factor mentioned earlier plays a part here. It is similar to the sensation the average individual experiences when being waited upon by the store owner in person, rather than by one of his salespeople. It is on the order of the sales-psychology involved in correspondence by air-mail. In other words, that he should be waited upon by a lawyer in the matter of his doctor's bill will probably not lower the individual's conception of his own importance and will certainly not lower the respect he has for his doctor.

THE WHOLE PROBLEM TYPIFIED

By way of summary, we find the whole medical problem typified by "the no cure-no-pay" situation that arises from time to time in the practice of the members of the profession. In such cases all the powers of the doctor must be centered upon educating the patient to a realization of the complex nature and genuine value of the services rendered to him.

Take for example a condition of multiple arthritis or malignant tumor. The doctor gets a long letter that the patient is not cured and that he is therefore under no obligation to pay his bill. A situation of this kind is perhaps the hardest one to be found in the collection of the doctor's accounts. One of the oustanding clinic managers of the middle west feels that this one situation is the hardest thing he has to combat.

When the doctor gets one of these no cure-no pay letters he is faced with a situation demanding a detailed answer. He will do well to follow the example of others who have met this problem with success. Let him point out in his bill the amount of work that has been done; let him point out the cost of producing the work, the cost of materials, the cost of the professional service from beginning to end. Let the patient be reminded that he came and asked for this service of his own free will, that it was willingly rendered to him, and that as a fair and reasonable person he is obligated to discharge the debt owed. It must be always made manifest to the patient that the doctor willingly gives the best of his skill and the benefit of all of his specialized knowledge when his service is sought for. That this service must be paid for is purely a matter of education, and it is the type of education that must be continuous.

We may agree, then, that successful collections require, first, a clear understanding on the part of the patient at the time of his discharge both of the value of the services received and of the method to be employed in paying. Success demands, secondly, that collections be not only prompt, regular and systematic, but that they be so carried on that a sense of friendship and gratitude is kept fresh in the patient's mind. Successful medical collections require, finally, the use of skillfully varied appeals and vigorous resale.

The final solution to the problem of collecting the doctor's bill lies in the proper credit education of all future patients. If doctors attempt to do this individually, it will be but a slow process. More effective will be cooperative action in the form of educational publicity sponsored by the several medical associations.

INTRADERMAL TREATMENT OF ARGYRIA

Arthur William Stillians and Theodore Kenneth Lawless, Chicago (*Journal A. M. A.*, Jan. 5, 1929), show that the intradermal injection of a mixture of 1 per cent potassium ferricyanide with 6 per cent sodium thiosulphate removes a large part of the silver from the skin in old cases of argyria with deep pigmentation. The blue color disappears most easily. The same mixture injected intravenously seems to be without effect.

Twenty-Seven Licensed by Medical Examiners at January Meeting; Subject of Roentgenology Now Included in Examination

Twenty-seven applicants to practice medicine and surgery in Wisconsin were licensed by the State Board of Medical Examiners at its annual January meeting held in Madison according to a report received from Dr. Robert E. Flynn, La-Crosse, Secretary of the Board. Following its suggestion to a legislative committee in the session of 1927, the Board has now included the subject of roentgenology in its examinations. Those licensed and the questions follow:

Licensed by Examination

Name	Year of Birth	Preliminary Education	School of Graduation	Present Address
Burke, Mead, M. D.	1894	B. A. U. of Wis.	Rush Med.	Wis. Gen. Hosp. Madison, Wisconsin.
Cuff, Walter B., D. O.	1905		DesMoines Still Col. of Osteopathy	515 Steuben St., Wausau, Wis.
Pratt, Helen E., M. D.	1903	A. B. U. of Wis.	U. of Penn. Med. School	Oconomowoc, Wis.
Ritchie, Gorton, M. D.	1901	B. A. U. of Wis.	U. of Penn. Med. School	Wis. Gen. Hosp. Madison, Wisconsin.
Scullard, Garner, M. D.	1896	U. of Ontario	U. of Ont. Med. School	1421 State St, Eau Claire, Wisconsin.
Strauch, Clauss B., M. D.	1896	A. B. Williamsberg, Germany	U. of Munich, Germany	McGregor, Minnesota
Taube, Edward L., M. D.	1903	U. of Toronto	U. of Toronto Med. School	2752 Roosevelt Road, Chicago, Ill.

Reciprocities

Augur, Alexander, M. D.	1888	U. of Budapest	U. of Budapest	Cherokee, Ia.
Banyai, Andrew L., M. D.	1893	U. of Budapest	U. of Budapest	Muirdale, San., Milwaukee, Wisconsin.
Bump, Warner S., M. D.	1901	B. S. U. of Wis.	Rush Med. School	1717 Hoyt St., Madison, Wisconsin.
Church, Osmon C., M. D.	1874	B. S. degree Austin, Col.	Barnes Med. College	Wis. Mem. Hosp., Mendota, Wisconsin.
Eiel, Merrill O., M. D.	1903	B. S. degree U. of Iowa	U. of Iowa Med. School	618 Stockton Ct., Madison, Wisconsin.
Elliott, Mary H., M. D.	1880	Nat'l U. of Arts St. Louis, Mo.	Loyola U. School of Med.	Box 253, Sparta, Wisconsin.
Faxon, Donald E., M. D.	1896	U. of Michigan	U. of Ill. Med. School	Schiek Clinic, Rhinelander, Wisconsin.
Fetter, Mary, M. D.	1902	U. of Minnesota	U. of Minn. Med. School	1043 Lincoln Avenue, St. Paul, Minnesota.
Gieselman, J. H., D. O.	1905		Kirksville Col. of Osteo.	1025 Univ. Ave., Madison, Wisconsin.
Haggerty, Warren T., M. D.	1902	B. S. Marquette University	Marquette Med. Univ.	Spooner, Wis.
Hartman, Everett C., M. D.			Northwestern Med. School	500 Milwaukee Avenue, Janesville, Wisconsin.
Hulett, Horace L., M. D.		Alfred University	U. of Buffalo Med. School	Box 132, Milton, Wisconsin.
Jordan, Elverse M., M. D.	1896	U. of Texas	U. of Texas Med. School	306 Cherry St., Green Bay, Wisconsin.
Kuegle, Frederick H., M. D.	1878	A. B. degree U. of Neb.	John Creighton Med. School	Janesville, Wisconsin.
Light, George, M. D.	1900	B. A. degree Little Rock Med. School	U. of Arkansas Med. School	114 15th St., Milwaukee, Wisconsin.
Littig, Amy L., M. D.	1900	U. of Iowa	U. of Iowa Med. School	Columbia Hosp., Milwaukee, Wisconsin.
Millard, Allen LaM., M. D.	1900	U. of Wisconsin	Rush Med. Col.	Marshfield, Wisconsin.
Quinn, Lester H., M. D.	1897	U. of Indiana	U. of Indiana Med. School	Wis. Gen. Hosp., Madison, Wisconsin.
Richardson, Samuel A., M. D.	1892	B. S. U. of Iowa	U. of Iowa Med. School	491 7th St., Milwaukee, Wisconsin.
Scholten, Wm., M. D.	1879	Nebraska Normal	U. of Neb. Med. School	Milwaukee San., Wauwatosa, Wisconsin.
Stefan, Wm. K., D. O.	1890		Des Moines Still Col. of Osteopathy	Wahoo, Nebraska.
Strawbridge, Fred H., M. D.	1892		Meharry Med. School	Akron, Ohio.
Trumbo, James K., M. D.	1897	U. of Ill., B. S. degree	Northwestern Med. School	520½ 3rd St., Wausau, Wisconsin.

SURGERY

Rob't E. Flynn, M. D., Examiner

Answer any eight.

1. Give signs, symptoms and treatment of a basal skull fracture.
2. Discuss toxic thyroid adenoma as to symptoms, diagnosis, complications, pre- and operative treatment.
3. Give diagnosis and treatment of empyema in a child six years old.
4. (a) What are the symptoms and diagnosis of a perforated gastric ulcer?
   (b) Discuss operative procedure.
5. Discuss conservative and radical treatment of an early carcinoma of uterus.
6. What pathological conditions may simulate an acute appendicitis? Differentiate clinically.
7. (a) Discuss relative significance of gall bladder visualization test.
   (b) Outline two liver function tests.
8. Give symptoms, diagnosis and treatment of a tubercular hip in a child.
9. What are the dangers and contra-indications of a general anesthetic?
10. In what surgical condition would you consider radium therapy of value?

PRINCIPLES AND PRACTICE OF MEDICINE

J. Gurney Taylor, M. D., Examiner

1. Acute peritonitis.
   Give causes, symptoms, diagnosis and treatment.
2. Acute bronchitis.
   Discuss symptoms, physical signs, diagnosis and treatment.
3. Acute nephritis.
   Discuss causes, symptoms, diagnosis, treatment and sequela.
4. Acute pericarditis.
   Differentiate from a. Acute endocarditis.
   b. Cardiac hypertrophy.
   c. Cardiac dilatation.
5. Cerebral tumors.
   1. What symptoms are commonly present?
   2. Name the most important causes.
6. Ringworm of scalp.
   (a) Describe symptoms and appearance.
   (b) Treatment.
7. Muscular rheumatism.
   Give varieties with their symptoms and treatment.

PEDIATRICS

J. Gurney Taylor, M. D., Examiner

1. State causes, symptoms and treatment of prolapse of rectum and anus.
2. Infantile scurvy. Give symptoms, diagnosis and treatment.
3. At what age would you start a cereal feeding?
   Orange juice?
   Cod liver oil?
   Give specific directions regarding the amount to be given.
4. Give symptoms and treatment of idiopathetic dilatation of the colon (Hirschsprung's disease).
5. Pyelitis.
   (a) Describe a typical acute case of pyelitis.
   (b) Discuss the urine analysis and microscopical findings.
   (c) What may be the possible complications?
   (d) Outline treatment in full.

PHYSICAL DIAGNOSIS

E. C. Murphy, D. O., Examiner

1. Give the clinical features of cerebrospinal meningitis.
2. Give physical signs and symptoms of chronic myocarditis, with decompensation.
3. What are the diagnostic signs of retropharyngeal abscess.
4. Give symptoms of obstruction of the common bile duct.
5. Give symptoms of acute general peritonitis.

NEUROLOGY

E. C. Murphy, D. O., Examiner

1. What neurological tests would you apply in case of suspected spinal cord tumor in the upper dorsal region.
2. Give etiology, symptoms, and prognosis of Bell's palsy.
3. What tests would you use to determine pathological states of the cranial nerves?

HYGIENE

E. C. Murphy, D. O., Examiner

1. Describe the hygienic care of a patient and his surroundings in scarlet fever.
2. What diseases are incident to school life? How may these diseases be prevented?

OBSTETRICS

John E. Guy, M. D., Examiner

Answer seven of the following questions:

1. Give the symptoms of extra uterine pregnancy before and after ruption, with treatment of each.
2. Define first, second and third stages of labor.
3. Define eclampsia, and outline the treatment of an attack.
4. Give the indications for a Caesarean section.
5. What are the indications for induction of premature labor?
6. How can an O. L. A. position be diagnosed before labor?
7. Outline the care during the puerperium.
8. Define placenta-praevia, and enumerate its dangers.

GYNECOLOGY

John E. Guy, M. D., Examiner

Answer four of the following questions:

1. Differentiate vulvo-vaginal cyst or abscess from hernia.
2. Differentiate between malignant and non-malignant tumors of the uterus.
3. Enumerate the causes and give the symptoms and treatment of acute salpingitis.
4. Give types of uterine displacements with symptoms and findings.
5. Give chief causes of enlargement of an ovary.
6. From what must you differentiate a large ovarian cyst, and give your points of differentiation.

ROENTGENOLOGY

J. Gurney Taylor, M. D., Examiner

Answer first three questions and two of the remaining questions—five (5) must be answered.

1. Why is it essential to always make at least two x-ray

exposures, preferably antero-posterior and lateral, in examining an extremity for fracture?
2. What is the value of a complete x-ray examination in a case of suspected pulmonary tuberculosis?
3. (a) When is the use of x-rays or radium indicated in the treatment of cancer? Why?
   (b) In the treatment of what types of cancer are x-rays or radium especially successful?
4. What dangers are to be met in the treatment of psoriasis and eczema with x-rays?
5. What is the value of x-ray examination of a fracture before reduction?
   (b) After manipulation and immobilization?
6. What are the common dangers attended with the use of x-ray for diagnostic purposes?
7. Assuming that a physician is sued for alleged x-ray injury, what are requisites for his defense?
8. Name six skin diseases in which the x-rays are, if properly employed, of special therapeutic value.
9. Under what circumstances may a physician properly employ the x-rays in treatment of cutaneous diseases?
10. In the absence of stone pathology, what x-ray examination would be indicated in suspected hydronephrosis?

ANATOMY

Wilbur N. Linn, M. D., Examiner

1. Name the bones of the head.
2. Describe the male urethra and state its sub-divisions.
3. Give an anatomical description of the bronchial tubes.
4. Origin and distribution of the median nerve.
5. Locate and describe the spleen.
6. What tissues of the abdominal wall are divided in the operation of appendicitis?
7. Locate and briefly describe the gall-bladder.
8. Describe the sympathetic nerve, naming and locating the principal ganglia.

EYE, EAR, NOSE AND THROAT

Wilbur N. Linn, M. D., Examiner

1. Origin and distribution of the optic nerves.
2. Describe the auditory apparatus.
3. Describe gross anatomy for the larynx.
4. Describe the nasal fossae.

MATERIA MEDICA

T. J. Sheehy, M. D., Examiner

1. Discuss the action of hypnotic drugs.
2. Describe Dover's powder and give its principal uses.
3. Give the incompatibilities of the following drugs: (a) iron, (b) bismuth, (c) potassium iodide.
4. Describe the effects of chloral on the central nervous system.
5. Write a prescription for a cough mixture containing codein, intended for an adult, expressing the ingredients in the metric and apothecary terms.
6. Give the parts of a prescription.
7. (a) What drugs may be used to check diarrhea?
   (b) Describe the manner of action and dosage of three of the drugs.
8. (a) What are the prevalent ideas concerning the role of iodin in the physiological activity of the thyroid?
   (b) What are the signs of thyroid over dosage?

TOXICOLOGY

T. J. Sheehy, M. D., Examiner

1. Give the symptoms and treatments of acetanilid poisoning.
2. Describe bromism and state how it is produced.
3. Treat a case of carbolic acid poisoning.

CHEMISTRY

Royal C. Rodecker, M. D., Examiner

1. Describe carbon monoxide: Give treatment for poisoning by this agent.
2. Describe potassium hydroxide: Therapy: Give very common name for it.
3. What is bleaching powder: Black Wash: Yellow Wash.

PATHOLOGY

Royal C. Rodecker, M. D., Examiner

1. Pathological diagnosis between cancer and syphilis of the cervix.
2. Diagnosis of soft myoma of the uterus at the age of 40.
3. Give descriptive definition of rickets: Etiology.
4. Name the organs of which cancer metastasize to the bones. Describe effects.
5. Name types of emboli. Describe the effects of each.
6. Give causes and diagnosis of pyelitis in pregnancy.
7. What lesions may occur in the broad ligament.
8. Different diagnosis of carcinoma and sarcoma.

PHYSIOLOGY

J. B. Brewer, M. D., Examiner

1. Describe the movements of the blood corpuscles in the capillaries and explain the phenomena of diapedesis.
2. What would be the effect on the saliva and digestion if both Stenson's ducts should be divided?
3. What at present is known as vitamins, and to what extent have their acceptance altered our views of nutrition.
4. Name some of the factors affecting the time limit of blood coagulation.
5. Name at least three factors responsible for the return of lymph.
6. Why is a mixed diet demanded physiologically?
7. State origin of glycogen in liver. What is its destination?
8. What function is altered by the removal of the thyroid gland?

MATERIA MEDICA

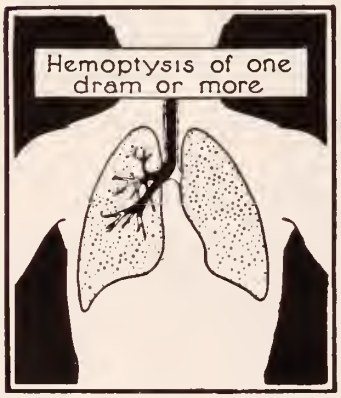
J. B. Brewer, M. D., Examiner

1. State dose of Fl. Extract of Belladona. (b) Tr. Hydrastis.
2. What are the uses of apomorphine?
3. Write a prescription containing stomachic to be used in alcoholism.
4. What form of iodine is most frequently given internally?
5. What are the therapeutic uses of aconite? Give dose of Extract, Tr.
6. Mention the principle therapeutic application of antipyrine.
7. What are the physiologic effects of digitalis?

(Continued on page XXIV)

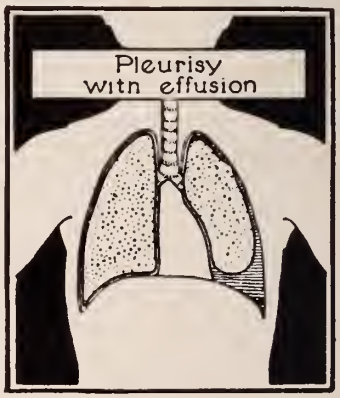
Five Diagnostic Points of Pulmonary Tuberculosis

There is no short cut to the diagnosis of pulmonary tuberculosis. The presence of tubercle bacilli in the sputum on two or more occasions is the only conclusive sign. However, the careful evaluation of evidence surrounding any one of the other four criteria will help materially to lead us in the right direction.



1. A history of hemoptysis of one dram or more without any other known cause.

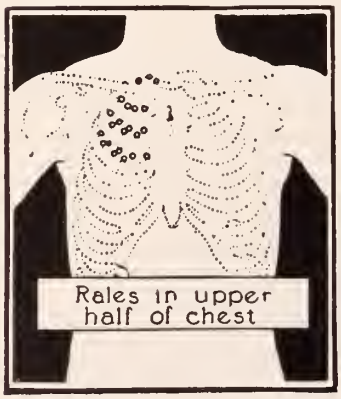
Presumptive Evidence



2. A history of an otherwise unexplained pleurisy with effusion.

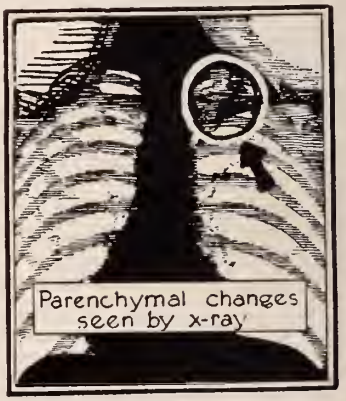
Conclusive

5. The demonstration of tubercle bacilli in the sputum on two or more occasions.



3. Definite rales which persist for a week or more in the upper half of the chest.

Strongly Presumptive



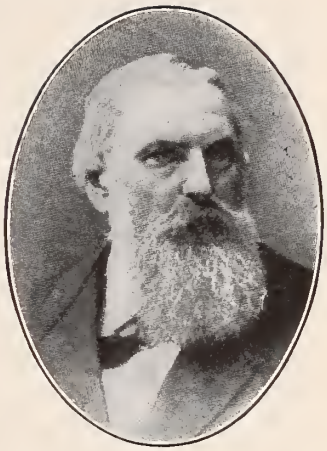
4. Definite evidence of parenchymal changes seen in the x-ray film, located usually in the upper half of the chest.

Drawings by National Tuberculosis Association

The campaign to stimulate the Early Diagnosis of Pulmonary Tuberculosis is now on. Take part by developing a good routine chest examination.

Five Pioneers in the Diagnosis and Treatment of Pulmonary Tuberculosis

Rene Theodore Hyacynth Laennec
1781-1826
The first to use the stethoscope to define more clearly the sounds of the chest.



Herman Brehmer
1826-1889
Opened the first sanatorium for the treatment of tuberculosis at Goerbersdorf, Prussia, 1853.

Edward Livingston Trudeau
1848-1915
Developed the first sanatorium for the treatment of tuberculosis in America.

Louis Pasteur
1822-1895
The father of bacteriology.

Robert Koch
1843-1910
The discoverer of the tubercle bacillus as the cause of tuberculosis.

Doctor: Would you be interested in a one or two-day course to review the technique of examination and to consider the most approved methods of diagnosis and treatment?

Please use and mail this note to The Wisconsin Anti-Tuberculosis Association, 558 Jefferson Street, Milwaukee, Wisconsin, if interested.

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Address.....

Preferred Dates.....

THE JOURNAL BOOK SHELF

Roentgenology. Its early history, some basic physical principles and the protective measures. By G. W. C. Kaye. With forty-nine illustrations. Price $2.00 net. Paul B. Hoeber, Inc., New York.

Bronchial Asthma. Its Diagnosis and Treatment. By Harry L. Alexander, M. D., associate professor of medicine in the Washington University Medical School, St. Louis, Mo. Illustrated. Price $2.25 net. Lea & Febiger, Philadelphia.

Acute Infectious Diseases. By Jay Frank Schamberg, M. D., professor of dermatology and syphilology in the Graduate School of Medicine, U. of Penn., and John A. Kolmer, M. D., professor of pathology and bacteriology in the Graduate School of Medicine, of the U. of Penn. Second edition, thoroughly revised. Illustrated with 161 engravings and 27 full-page plates. Price $10.00 net. Lea & Febiger, Philadelphia, 1928.

Pediatrics for the General Practitioner. By Harry Monroe McClanahan, M. D., professor of pediatrics emeritus, University of Nebraska. Two hundred and thirty illustrations. Price $6.00. J. B. Lippincott Co., Philadelphia and London.

History of Medicine, With Medical Chronology. Suggestions for study and bibliographic data by Fielding H. Garrison, M. D., Lt. Colonel, Medical Corps, U. S. Army, Surgeon-General's Office, Washington, D. C. Fourth edition, revised and enlarged. Octavo of 996 pages, with 286 portraits and other illustrations. W. B. Saunders Company, Philadelphia and London, 1929. Cloth, $12.00 net.

Blood. A study in general physiology. By Lawrence J. Henderson, professor of biological chemistry in Harvard University. More than 200 illustrations. Price $5.00. Yale University Press, New Haven, 1928.

Partnerships, Combinations and Antagonisms in Disease. By Edward C. B. Ibotson, M. D., Fellow Royal Society of Medicine, London. Illustrated. Price $3.50 net. F. A. Davis Company, Philadelphia.

Laboratory Manual of the Massachusetts General Hospital. By Roy R. Wheeler, M. D., and F. T. Hunter, M. D. Second edition, enlarged and thoroughly revised. Price $1.75 net. Lea & Febiger, Philadelphia.

Compend of Diseases of the Skin. By Jay Frank Schamberg, M. D., professor of dermatology and syphilology, Graduate School of Medicine, University of Pennsylvania. Eighth edition, revised and enlarged with 127 illustrations. Price $2.00 net. P. Blakiston's Son & Co., Philadelphia.

Outlines of Pathology in its historical, philosophical and scientific foundations. A guide for students and practitioners of medicine. By Horst Oertel, Strathcona professor of pathology, McGill University, Montreal. Renouf Publishing Company, McGill College Avenue, Montreal.

Thrombo-Angiitis Obliterans. Clinical physiologic, and pathologic studies. By George E. Brown, M. D., and Edgar V. Allen, M. D., Division of Medicine, Mayo Clinic; collaborating in pathology with Howard R. Mahorner, M. D., Mayo Foundation. 12mo of 219 pages with 62 illustrations. Price $3.00 net. W. B. Saunders Company, Philadelphia and London.

The Blood Plasma in Health and Disease. By J. W. Pickering, D. Sc., lecturer on Haematology, University of London, King's College. The Macmillan Company, New York, 1928.

BOOKS RECEIVED FOR REVIEW

The Elements of the Science of Nutrition. By Graham Lusk, professor of physiology at the Cornell University Medical College, New York City. Fourth edition, reset. Octavo of 844 pages. Price $7.00 net. W. B. Saunders Company, Philadelphia and London, 1928.

Imperative Traumatic Surgery with special reference to After-Care and Prognosis. By C. R. G. Forrester, M. D., consultant, teaching staff, Illinois Post Graduate School, Chicago. Illustrations, 598. Price $10.00 net. Paul B. Hoeber, Inc., New York, 1929.

Angina Pectoris. By Harlow Brooks, M. D., professor of clinical medicine, New York University. Price $2.50. Harper & Brothers, Publishers, New York City.

Spinal Anesthesia, Principles and Technique. By Charles H. Evans, M. D., clinical assistant, New York Post Graduate Medical School and Hospital. Illustrations, 41, with 3 in color and 1 folding colored plate. Price $5.50 net. Paul B. Hoeber, Inc., New York City.

The Technic of Local Anesthesia. By Arthur E. Hertzler, M. D., professor of surgery in the University of Kansas. Fourth edition, with 146 illustrations. Price $6.00. C. V. Mosby Co., St. Louis, 1928.

Injection Treatment of Internal Hemorrhoids. By Marion G. Pruitt, M. D., associate in surgery, medical department, Emory University. Illustrated. Price $3.00. C. V. Mosby Company, St. Louis, 1929.

Physiology of Bone. By R. Leriche and A. Policard. Translation by Sherwood Moore, M. D., and J. Albert Key, M. D., of Washington University School of Medicine. Illustrated. Price $5.00. C. V. Mosby Company, St. Louis, 1928.

The Climacteric (The Critical Age). By Gregorio Maranon, professor of medical pathology in the Madrid General Hospital, member of the Royal National Academy of Medicine. Translated by K. S. Stevens and edited by Carey Culbertson, M. D., associate clinical professor of obstetrics and gynecology, Rush Medical College of the University of Chicago. Price $6.50. C. V. Mosby Company, St. Louis, 1929.

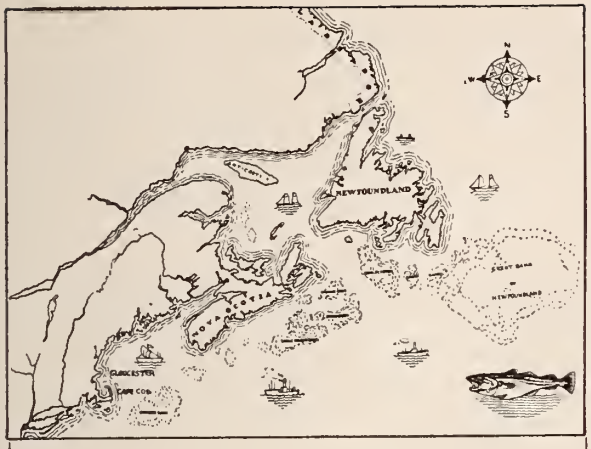
Blood and Urine Chemistry. By R. B. H. Gradwohl, M. D., director of the Gradwohl Laboratories, St. Louis, and Ida E. Gradwohl, A. B., instructor in the Gradwohl School of Laboratory Technic, St. Louis. With 117 illustrations and 4 color plates. Price $10.00. C. V. Mosby Company, St. Louis, 1928.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Secretary, Mr. J. G. Crownhart, 119 E. Washington Ave., Madison, Wisconsin. These new books will be loaned for an inspection period only.

A Text-Book of Surgery. By W. Wayne Babcock, M. D., professor of surgery and clinical surgery in the Temple University, Philadelphia. Octavo of 1367 pages with 1050 illustrations, 9 of them in color. Price $10.00 net. W. B. Saunders Company, Philadelphia and London, 1928.

The author has arranged an enormous amount of material in an orderly and readable manner. No chapters are outstanding; all are adequately covered. The illus-



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Along the shore line, from Cape Cod to Labrador, are the Patch plants—where the oil is obtained from the fresh livers. Out on the Banks are the steam trawlers equipped with the Patch cooker, where the oil is made soon after the fish come out of the water.

To increase resistance against disease and to build up energy after influenza and similar conditions—Patch's Flavored Cod Liver Oil, with its high Vitamin A content, is particularly valuable.

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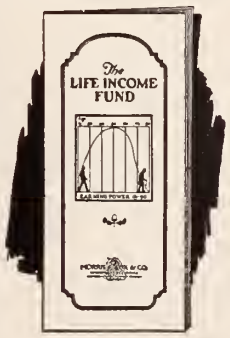

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trations are good and are sufficiently numerous to be a great help to students.

The obvious impossibility of putting the world's knowledge of surgery into one textbook has been no more adequately handled than in other texts.

The reader can get only the merest outline of the causes, symptoms and treatment of any disorder. The principles of surgery which rest upon physiology are not stressed so much as they might be. Such omissions are rather universal, and this text is no worse than others.

Until some inspired surgeon sees fit to write a textbook of surgery that will include the principles and the aims of surgery and omit technique and the discussion of particular diseases, this text will stand as one of the better books on surgery. F. R.

Problems in Surgery. University of Washington Graduate Medical lectures for 1927. By George W. Crile, M. D., edited by Amy F. Rowland. Octavo volume of 171 pages, illustrated. Price $4.00 net. W. B. Saunders Company, Philadelphia and London.

This volume does not purport to be a monograph on any of the subjects discussed in it. It is a record of a rather informal discussion of the various subjects which have seemed to the author to be of prime importance in present day surgery. The lectures were delivered in the course of Graduate Medical Lectures at the University of Washington during the summer of 1927. The book contains excellent chapters on The Management of the Acute Infections; A General Consideration of the Treatment of Premalignant and Malignant Conditions; Operations on the Bad-Risk Patient; The Mechanism of Hyperthyroidism; and a Diagnostic and Operative Clinic. The chapter on the author's favorite Bipolar Interpretation of Certain Normal and Pathological Conditions is not as convincing as are some of the purely clinical features of the book.

S. J. S.

Thyroxine. By Edward C. Kendall, M. S., the Mayo Foundation, Rochester, Minnesota. Price $5.50. Book Dept., Chemical Catalog Co., Inc., New York City, 1929.

This monograph of the American Chemical Society is an exhaustive recapitulation and summary of all that is known about Thyroxine. Dr. Kendall has divided the subject into twenty-one chapters, viz; Early Chemical Investigations of the Thyroid; The Isolation and Identification of Thyroxine; Methods for the Separation of Thyroxine; The Chemical and Physical Properties of Thyroxine; The Iodine Content of the Thyroid Gland; The Chemical Nature of Iodine Compounds in the Thyroid Gland; The Influence of the Thyroid on Hypothyroidism, Nitrogen, Phosphorus and Calcium Metabolism and on the Distribution of Water; The Influence of the Thyroid on the Nerves; The Influence of the Thyroid on the Toxicity of Acetonitril; The Thyroid and Basal Metabolism; The Influence of Lack of Oxygen on the Animal Organism; The Thyroid and Carbohydrate Metabolism; The Influence of the Thyroid Gland on Growth, on Certain Phases of Cellular Activity in the Animal Organism and on Unicellular Organisms; The Influence of the Thyroid on the Metamorphosis of Amphibian Larvae; Standardization of Thyroid Material; The Physiological Activity of Various Preparations from the Thyroid Gland; The Relation Between the Histological Appearance and the Physiological Activity of the Thyroid Gland; Clinical Aspects of Thyroid Disease; The Function of the Thyroid; Chemical Reactions Which Are Influenced by Thyroxine; The Influence of Thyroxine and Epinephrine on Biological Oxidations.

A glance at the foregoing chapter headings reveals that the chemistry of the thyroid constitutes a large part of the monograph. The reviewer doubts whether the average well-trained physician could read the subject matter understandingly. He admits that frequently he was way over his head. In spite of this there is much in the book that is intensely interesting, and the author has briefly summarized the discussions in every chapter at the end of the respective chapters so that one who can not grasp the purely chemical discussions yet acquires the gist of the matter.

Some important statements are made here and there with some of which all medical men might not agree. It is interesting that "there is a marked seasonal variation in the iodine content of thyroid glands of animals grown in the northern portion of the Mississippi Valley. A seasonal variation has not been observed in English and Scottish sheep." (p. 59.) Again it is not possible to separate thyroxine in crystalline form from physiologically active samples of dessicated gland.

Harington's work is reviewed and credit is given to him for chemical synthesis of a compound identical with thyroxine.

The standardization of thyroid material is difficult. (p. 173.) No simple and satisfactory test is at present known. A paragraph on p. 194 is interesting: "Goiter may be produced by improper diet or by unhygienic surroundings. Administration of iodine brings about histological changes and the deposition of colloid. Biologically inactive iodine may be present in the gland. There may be no parallelism between the biological activity and colloid, the amount of colloid and iodine, or between the iodine and the biological activity."

One more summary on p. 198 will probably not be accepted by all: "Hyperthyroidism associated with adenomatous goiter is due to an excessive outpouring of thyroxine. The symptoms of hyperthyroidism differ in no way from those following the administration of dessicated thyroid or thyroxine. Exophthalmic goiter is characterized by nervous phenomena and by a tendency to terminate in the so-called goiter crisis and death; the clinical symptoms in exophthalmic goiter suggest that this disease is due to both hyperthyroidism and a dysthyroidism."

The book is a valuable contribution to the literature of thyroxine and, even though it is tough reading at times, there is much in it which is important to know for all who treat thyroid diseases.

Dr. Kendall has accomplished a splendid piece of work and he is to be congratulated. L. M. W.

Your patients will be grateful to you

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relieve . . . caked breasts painlessly.

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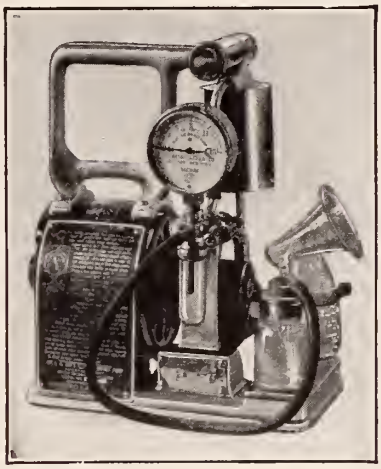

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Life Cycle of the Tubercle Bacillus

(Continued from page 171)

a segmenting process giving rise to a number of separate units in the form of oval bodies. The number of units seemed to be dependent on the size of the bacillus. These oval bodies did not develop directly into adult bacilli but many of them subdivided into diplococcoid types which appeared like very small pneumococci. Resubdivision of these tiny bodies proceeds at a comparatively rapid rate in the incubator and the droplet is soon found to be well populated with tiny cocci and diplococci too small to measure. In this stage the granules are non-acid-fast and after further incubation appear as tiny groups of dustlike particles in the droplet. At the end of 1 to 4 days longer delicate rods are found sprouting from the periphery of a clump of such dust granules. The rods are so small at first that measurement with a hair micrometer is impossible. These rods grow with varying rapidity and finally adult acid-fast rods are produced. Whether these tiny rods sprout from individual granules or whether the granules elongate into the delicate rod is at present impossible of answer for want of proper magnification. It is certain, however, that in the early stage of their development they are non-acid-fast and as they mature they stain with the gram stain, probably because of the formation of the acid-fast coating which develops on the maturing organism.

It is claimed that the non-acid-fast rods and granules are more common when the culture medium is unfavorable to the growth of the organism. In the Cornell study the non-acid-fast forms were found to be numerous at a certain stage of the developmental cycle when the culture medium was favorable.

If the Cornell studies are confirmed we will have new light on the spread of tuberculosis. It may mean new light on cases of occult tuberculosis. It may possibly prove that Calmette and the French school are right in the frequency of intraplacental infection by means of a filterable virus which results in an infection of the foetus in utero. The studies in this field have sufficiently advanced so that the members of the medical profession should realize that a negative sputum from a patient with tuberculosis does not necessarily mean that such patient is incapable of transmitting the disease to others.

Medical Board Questions

(Continued from page 189)

CHEMISTRY

J. B. Brewer, M. D., Examiner

1. Define positive element, negative element. Define chemistry.
2. What changes take place in milk when exposed to atmospheric influences?
3. What are the general methods by which crystals may be obtained?

MEDICAL JURISPRUDENCE

J. B. Brewer, M. D., Examiner

1. Under what circumstances may a general practitioner employ the Roentgen rays in treatment of disease without liability of malpractice?

DIETETICS

J. B. Brewer, M. D., Examiner

1. Give dietetic requirements in treating a case of pulmonary tuberculosis.
2. Discuss the purposes of meat inspection.

JOURNAL CLINICAL CLUB

University of Wisconsin

IODINIZED OIL IN THE DIAGNOSIS OF PREGNANCY

H. A. Miller, M. D., and D. B. Martinez, M. D.
Radiology, September, 1928.

Iodinized oil was first injected into the uterus to diagnosis pregnancy by C. Heuser (Lancet, 1925). He claimed that x-ray films were conclusive when one or two months had passed since L. M. P. and that the method was safe so far as interference with the continuation of pregnancy.

X-ray films in the non-pregnant uterus show a triangular cavity filled with oil and if the tubes are open, the lipiodol follows to the end of the tube.

In the gravid uterus, there is an irregular mass, filling that part of the uterus unoccupied by the conception. Out of fifteen cases studied these authors encountered three cases which aborted—20%. These abortions are sufficient cause to condemn lipiodol x-ray examination for the diagnosis of pregnancy.

FURTHER OBSERVATIONS ON THE SATURATION METHOD IN ROENTGEN THERAPY AS APPLIED TO DEEP-SEATED MALIGNANT DISEASE.

G. E. Pfahler, M. D.
A. J. of Roentgenology, Sept., 1928.

The saturation method is the delivery of an erythema dose into the diseased tissue and its maintenance for a certain time by means of additional smaller doses. Curves

A new milk modifier and diet supplement *with the added value of Vitamin B*

> **"I believe that every infant should have an addition of Vitamin B to its formula and should not depend on milk, either human or cow's, as its only source of this vitamin. Just as regularly as orange juice and cod-liver oil are prescribed, one should also prescribe a substance rich in Vitamin B for the infant dietary."**
>
> B. RAYMOND HOOBLER, M. D., DETROIT
> *Journal A. M. A., August 4, 1928*

The dangers from Vitamin B deficiency in artificially fed infants are apparent. Vitamin B is essential as a growth and antineuritic factor, as well as for adequate nutrition throughout life. The Vitamin B content of cow's milk is not constant and, when the milk is diluted, the vitamin content is necessarily reduced.

Even mother's milk may be very low in Vitamin B, particularly if the mother does not receive an adequate and balanced diet.

Quoting further from Dr. Hoobler's article:

> "It is the consensus of opinion among the laboratory investigators in the fields of nutrition that Vitamin B is the dietary factor which most rapidly stimulates growth, and indeed that it may be the most important factor.
>
> "Not only is this increase in growth brought about by stimulating the appetite and thus increasing the food intake, but even when the appetite is entirely satisfied and the individual remains on the same basal diet, an increase in Vitamin B substance will cause a gain in weight without necessarily increasing the intake of food. This would indicate that Vitamin B, in addition to stimulating the appetite, also brings about a better assimilation and utilization of the food intake."

To meet the need of pediatricians and general practitioners for a milk modifier dietetically suitable for the carbohydrate requirement of the infant, *and also possessing the added value of Vitamin B*, E. R. Squibb & Sons have developed Vitavose.

What Vitavose is

Squibb's Vitavose is a palatable and highly nutritious maltose-dextrin preparation, *exceedingly rich in Vitamin B* and assimilable iron salts. It contains not only maltose and dextrins but in addition all of the water-soluble extractives from the wheat embryo—Vitamin B, soluble nitrogenous compounds and mineral salts.

Wheat germs, freed from oil, are cooked, malted and extracted under conditions which preserve the important dietary properties and guarantee a maximum extraction of Vitamin B. The finished product, Vitavose, resembles a fine, golden yellow sugar with an agreeable malty taste.

What Vitavose is for

1. To modify cow's milk in infant feeding.
2. To supplement the diet of children, expectant and nursing mothers, invalids, convalescents and malnourished adults.
3. To supplement certain therapeutic diets where an abundance of Vitamin B and iron salts is indicated.

Because of its high Vitamin B content, Vitavose stimulates the appetite. Its slightly laxative qualities aid in overcoming a tendency to constipation.

Physiologically tested. Accepted by the Council on Pharmacy and Chemistry, American Medical Association

E. R. SQUIBB & SONS
Professional Service Dept.
80 Beekman St., New York

Please send me sample of Vitavose and detailed information.

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Address_____

SQUIBB'S VITAVOSE

for dosage are given for unfiltered rays for skin diseases and for filtered rays for deep-seated malignant disease. An erythema dose of unfiltered rays may be repeated in fourteen days. Moderately soft filtered rays may be repeated in three weeks, moderately hard rays in four to six weeks and hard rays in eight to twelve weeks. A saturation dose cannot be kept up indefinitely and here is the great danger of this method. However, its advantages outweigh its disadvantages.

DESIGN OF A WELL-PROTECTED RADIUM PACK

G. Failla, D. S. C.

A. J. of Roentgenology, Aug. '28.

Various protected x-ray containers have been used since 1918. The Memorial Hospital pack contains four grams of radium (i. e. 4,000 mg.) arranged in a movable lead container which affords protection for the hospital personnel. The radium is in the form of radium sulphate in forty platinum capsules, each containing 100 mg. of radium (element).

The capsules are short cylinders with flat ends so that they can be used endwise. The wall is 0.35 mm. throughout except for the gold soldered cap which is 0.5 mm. thick. The distribution over a circle 7.5 cm, in diameter is accomplished by inserting the capsules into suitable holes in a bakelite disc having a total area of 44 square cm. The mounted lead container weighs 120 pounds, with a devise for blocking off the radiation beam while the pack is being adjusted.

WHAT IS CLINICAL TUBERCULOSIS?

E. L. Pottenger

Am. Review of Tuberculosis.

Vol. 18: Page 570: 1928.

In answer to the statement on as to what causes the phenomenon which make up the picture of active tuberculosis, the discussion is begun by statement that active clinical tuberculosis is likely to be a succession of reinoculations with immunity responses. This statement was preceded by comparison of acute and chronic disease with the two types of immunity reactions; and a discussion of the difficulty in which the individual is placed in attempting to throw off or acquire an immunity for such a well protected organism as a tubercle bacillus.

This was succeeded by a discussion of the immunicological response stating that an individual in possession of immunes to Tb show a reaction in excess of that that follows the first inoculation. Evidence of the presence of immunes is shown by the phenomena 1, of a quickened and increased power to destroy invading tubercle bacilli; 2, an immediate inflammatory response at the point where they lodge in the tissues; and 3, a secondary inflammatory and exudative response in untreated foci elsewhere in the body. The first is evidenced by observation on the patients physically or by x-ray that many reinoculations occur without implantation and by resulting tissue response in violent reaction and exudation in lesions distantly situated showing release of tuberculoproteins from destruction. The second, local inflammatory reaction, is noted to be greater on reinoculation and immunity is apparent when it is noted that moderately large reinoculation fails to produce permanent disease. That a second inoculation in experimental animals in which the disease is established prolongs the life of the animal and in advanced tuberculous patient millions of bacilli pass over bronchi without reinoculation.

In the third evidence of immunity is inferred from the fact that numbers of bacilli in sputum per microscopic field increase many fold at the time of a reaction from reinoculation that is being carried on in distant foci. The author states that such reactions about distant unhealed foci does not disseminate the disease as has been so long feared. As long as the patient's immunity is relatively high, antituberculin reactions are curative and not harmful.

Symptomatology in clinical Tb can be interpreted as reaction by specifically resistant cells against an invading organism. Toxic symptoms are absolved poisons of reinoculations plus temperature indicative of antituberculin reactions or absorption of toxic substances. Hemoptysis, pleurisy, sputum, and repeated colds are local responses to reinoculation.

The course of the disease—

Active Tb represents simply reinoculation with attendant responses rise in temperature of a few days, several reinoculations with increase of symptoms continuous absorption of necrobe tissue exudate of products of destroyed bacteria.

Treatment limitation of reinoculations—rest, etc., healing of existing foci with stimulation by tuberculin reactions, stimulating doses of tuberculin are recommended in some cases, quiescent, failure of immediate healing or apparent metastasis.

HEMOLYTIC ANEMIAS IN PREGNANCY

William Allan, M. D.

Surg. Gyn & Ob., 47:669;1928.

The author states that pernicious anemia of pregnancy is an acute hemolytic anemia caused in some way by pregnancy, occurring in women under 35 years of age, with remissions possibly only in subsequent pregnancies, occasionally resulting in death but possible of cure after delivery by transfusion. Liver feeding has not been tried but he believes the acuity calls for quicker action than dietary measures.

The symptomatology includes weakness, vertigo dyspnoea, palpitation, poor vision, sore mouth, diarrhoea, vomiting, and fever.

Findings include lemon yellow tint to skin, pallor retinal hemorrhages, heart murmurs, splenic enlargement, slight edema, pain, parasthenias, and low blood pressure. There may be a variable amount of albumin in urine and urobilinogen may be present. There may be an achlorhydria. Blood picture similar to that of pernicious anemia.

He believes that the appearance of the anemia calls only for close observations during the latter few months of pregnancy and transfusions, and not sterilization the prevention of future pregnancies. It should be classified not an acute anemia and not with pernicious anemia which is chronic.

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Intestinal Obstruction*

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The history of ileus dates back to the beginning of medicine. The term refers to a twist and is probably derived from ileum, which means the winding or twisted portion of the intestine. Originally, ileus was employed as a collective term under which was included almost any distention of the abdomen, such as that due to ascites associated with diseases of the liver, as well as that associated with occlusion of the intestinal lumen. Inflammation of the bowel was regarded by early medical writers as the principal cause of ileus, but as early as the seventeenth and the middle of the eighteenth centuries the principal varieties of mechanical occlusions and narrowings were recognized by pathologists. Intussusception and volvulus were described in the seventeenth century. The importance of tumors as an etiological factor was also recognized. Intestinal obstruction due to gall stones was noted in the fifteenth and sixteenth centuries.

An active surgical attack upon ileus, which was coincident with the development of aseptic surgical technic, stimulated interest in it, and the frequency of ileus as a terminal stage in acute inflammatory lesions of the abdomen stimulated clinical and experimental studies designed to lessen the high mortality still associated with interference of the lumen or with peristaltic movements of the intestine.

Ileus is now used to define a symptom complex consisting of pain, vomiting, tympanites, and obstipation, rather than to define the anatomical lesion causing the obstruction. As in most types of surgery, the final results depend upon an early diagnosis which indicates the employment of correct procedures to overcome the existing pathological conditions.

In making a diagnosis it is well to have a definition and a classification as a working basis. Ileus is a symptom complex consisting of pain, vomiting, tympanites and obstipation. These are the cardinal symptoms, one of which may be lacking, sometimes two; but the four are the symptoms upon which the diagnosis of ileus is usually made.

A classification of ileus is important. A number of classifications have been suggested, but some are so complicated that they confuse rather than clarify. A good working classification is the following: (1) Dynamic ileus, in which the musculature of the bowel wall is contracted. This occurs in lead poisoning, certain cheese poisoning and in some diseases of the central nervous system, such as locomotor ataxia. (2) Adynamic ileus, in which the musculature of the bowel wall is paralyzed, as in peritonitis, torsion of the pedicle of ovarian cysts and fibroids, epididymitis, gall stone and renal colic, and reflexly with pneumonia and pleurisy. In this type of ileus the distention may be so symmetrical that no intestinal patterns are seen. (3) Mechanical ileus, in which there is a definite mechanical obstruction to the lumen of the bowel, such as occurs in carcinoma, in ileus due to bands, etc. (4) Strangulation ileus, in which the vessels are involved, as in embolism or thrombosis. The vessels may be secondarily involved, and mechanical ileus may become a strangulation ileus. In different types of paralytic ileus the vessels may also be primarily or secondarily affected.

The diagnosis is usually based upon the clinical history and findings, and no important new signs or symptoms have been added during the past few years. I do not believe that the x-ray has added enough to warant its extensive use. With an increasing clinical experience one cannot but be impressed with the frequency with which some of the classical symptoms are missing and with the frequency with which visible peristalsis can be detected in early cases of mechanical ileus before distention occurs. Fever is sometimes mentioned as one of the fairly constant features of the clinical picture, but fever is almost never present in uncomplicated cases.

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Notwithstanding the rather definite knowledge as to the pathological conditions found in ileus and the rather definite clinical picture, ileus is a surgical condition in which the mortality remains high. It has remained stationary or has been but slightly reduced in recent years. Statistics compiled in the late eighties and early nineties of last century show a mortality of 65.5%. Naunyn's article dealing with 288 cases shows a mortality of 61%, Schleier's with 457 cases a mortality of 51.½%. Statistics made ten to fifteen years later show no marked improvement. McGlannan studied 81 cases occurring at the Johns Hopkins and St. Agnes hospitals in Baltimore. Forty of the patients died giving a mortality of 49.4%. In Codman's series the mortality was 58.3%; in Richardson's 50%. In the Roosevelt Hospital series the mortality was 78.7%. In a Johns Hopkins and Union Memorial series the mortality was 60.4%. The mortality in the Presbyterian Hospital of New York series was 76.6%. Two hundred and twelve deaths occurred among the 344 cases treated in the hospitals cited above—a mortality of 60.7%. Improvements in asepsis and better clinical studies have apparently not reduced the mortality to any great degree. It is probably true, however, that the cases referred to the hospitals mentioned above are the bad ones, and that the mortality in some other hospitals or in hospitals in smaller communities might be lower. In these statistics cases of mechanical and strangulation ileus are not differentiated. A number of cases of strangulation ileus would raise the mortality rate.

It has been stated that "many cases of intestinal obstruction die cured." During the past few years a great deal of work has been done to determine the cause of death in cases of intestinal obstruction, for not infrequently patients have died after correction of a simple obstruction, in which apparently the integrity of the bowel wall had not been interfered with. Clinically it has been recognized for years that there is a distinct difference between high and low intestinal obstruction. Obstruction of the small bowel, especially, if high, proves rapidly fatal unless the obstruction is relieved; while obstruction of the large bowel is compatible with life for some time. It is important to determine the cause of death; for, if it can be found, a well formulated plan of treatment might be outlined. The indications which should be met in the treatment are often not well understood.

PATHOLOGICAL PICTURE

The pathological picture is frequently devoid of positive findings. The outstanding autopsy findings in patients who have died of intestinal obstruction are marked splanchnic engorgement, the bowel, if not ruptured, is much dilated above the obstruction; the bowel wall is dusky red and patches of gangrene may be found; the lumen is filled with stinking reddish-brown fluid which is rich in bacterial content; and the mucosa is deeply injected and ulcerated. Histologically the bowel wall shows marked capillary engorgement and areas of necrosis.

It is important to determine the toxicity of the material in the loops above the point of obstruction. Clinical observations would indicate that absorption of this material from the uninjured mucosa below the point of obstruction may account for death in some of these cases in which the obstruction is easily reduced and in which the bowel wall seems to be but slightly injured, if at all. Much of the experimental work undertaken to determine the toxicity of the contents of an unobstructed loop has been contradictory, and there is no unanimity of opinion among investigators as to whether a specific toxin is formed in the obstructed loop and as to the factors which influence the absorption of such a toxin, if present. Clairmont and Ranzi were apparently the first who believed that they had demonstrated that a toxin was formed within the lumen or mucosa of the obstructed bowel. Kukula and Magnus-Alsleben have shown that the contents of unobstructed loops are toxic when injected intravenously, and Wangensteen and Chunn state that the material below the point of obstruction is more toxic after passing through the Berkfeld filter than that obtained above the point of obstruction. It can be readily demonstrated, as Stone and his coworkers have repeatedly shown, that the material obtained from the intestinal loops above the point of obstruction is toxic and that animals into which this material is injected soon die with a definite train of symptoms. Such being the case experimentally, it is important (1) to determine when the contents of the obstructed loop become toxic, and (2) what determines the rate and amount of absorption. Stone and Braeye have shown that the material in the obstructed loop becomes toxic within a few hours after the obstruction is produced. The toxicity varies with the number and character of

the intestinal flora. In some cases the toxicity is lost when attempts are made to recover it in crystalline form.

If the contents of the obstructed loop are toxic, and most of those studying the problem clinically and experimentally believe that they are, it is of prime importance to determine the factors concerned in the rate of absorption, and how such absorption may be delayed or prevented.

Strychnine is absorbed from the obstructed loop of intestine, but at a slower rate than from a normal loop. Clairmont and Ranzi found that potassium iodide was absorbed from an obstructed loop more rapidly than from a normal. After the obstruction had lasted from ten to fifteen hours the rate of absorption was less and quickly sank to a low level. The results reported by different experimenters dealing with the rate of absorption of histamine are so at variance that it is difficult, almost impossible, to reconcile them. For example, Meakins and Harington placed histamine in different segments of the normal intestine of the cat. They found that a rather sharp fall of pressure occurred a few seconds after the introduction of histamine into the ileum, slightly less so after introduction into the duodenum, and much less so after introduction into the stomach and cecum. When the blood pressure was falling, they were unable to accelerate the fall by the introduction of more histamine. Wangensteen has not been able to confirm these observations. Stone and Firor have suggested that distention of the bowel, by increasing intestinal pressure, is an important factor in rate and amount of absorption from an obstructed bowel.

In strangulation ileus, in which autolytic processes associated with bacteriologic changes are occurring, physiologic results may be obtained which are not unlike those caused by the absorption or injection of the products of crushed muscle, and the results obtained in strangulation ileus cannot be applied directly to those occurring in mechanical ileus when the bowel wall is still intact.

Even if there is a mass of conflicting evidence, it seems safe to conclude that the contents of the bowel above the obstruction are toxic. The nature of the toxin is not known and the toxicity varies considerably. It is important to differentiate between the mechanical and strangulation type, for in the latter we are dealing with substances encountered in moist gangrene, and symptoms are observed in many of these cases which are not unlike those present in putrefactive infections. Toxicity is reduced by washing out the contents. The toxicity of the contents is increased when infected, as is indicated by one of Murphy and Brook's experiments in which the toxicity was increased when a streptococcic infection occurred in the closed loop. Animals with a closed loop live a long while. They live longest when the closed loop is low down. If the bacterial content plays an important factor in the symptoms, low obstruction should have more marked and rapidly developing symptoms than high because of the greater bacterial content of the bowel.

CLINICAL PICTURE

Clinically we are well acquainted with the rapidly developing clinical picture of high obstruction. Experimentally an animal suffering with high obstruction vomits, becomes dehydrated, has a tremor, manifests weakness of the hind legs, its pulse becomes weak and rapid, the blood pressure falls, the urine becomes scanty and coma precedes death.

A study of the blood in obstruction reveals a leukopenia, slightly increased fibrin content, high nonprotein nitrogen, due almost entirely to an increase in the amount of urea, low chloride content and a high carbon dioxide combining power. In the scanty urine there is a slight trace of albumen, the nonprotein nitrogen excretion is increased, there is a low chloride excretion and traces of phenol and indican. Haden and Orr believe that the decrease in chlorides is due to fixation in the tissues of the chlorine ion with the specific toxin absorbed from the bowel. In support of this theory they have reported experiments in which dogs with high obstruction have been kept alive from twenty to thirty days by giving normal salt by hypodermoclysis. It has been shown, however, that the fall in blood chlorides is not always present in fatal cases of obstruction and that the fall is usually proportional to the amount of chlorides lost in the vomitus or in the fluid which has accumulated in the bowel. Substitutes for salt are apparently ineffective in combating this condition, and while life may be prolonged by salt solution, the animal eventually dies. The cause of death cannot be directly ascribed to one factor.

Dehydration has frequently been suggested as an important factor in death from obstruction during the past few years. In 1912, Hartwell and Hoguet expressed the view that dehydration was

an important factor in causing the symptoms observed in high obstruction. It has been suggested by Gatch, for example, that in obstruction of the small intestine in which no strangulation had occurred, that the factors causing death are dehydration and reduction of the chlorides by vomiting and starvation. Draper, however, pointed out some years ago that the degree of dehydration observed in dogs with obstruction is no greater than that observed when dogs are fasting, and still the clinical pictures are entirely different. Dragstedt, Moorehead and Burcky have reported fatal obstruction in dogs without vomiting or loss of fluids. Ingvaldsen has measured the changes in water content and the tissues of a number of dogs. There was a moderate loss of water in some, but this was not constant in cases of high obstruction, and the worst symptoms were noted in the cases in which there was no dessication. Owings and McIntosh have had dogs live 21 to 24 days after occlusion of the bowel when no salt solution was given. Foster and Hausler assigned great importance to salt solution in the treatment of their animals.

Williams noted a similarity in the symptoms of gas gangrene and those of the late stage of ileus, and he ascribed to the bacillus aërogenes capsulatus and its toxins an important role in ileus. Owings and McIntosh, working in the Hunterian Laboratory, have shown that the perfringens is not specific and that the serum has no effect in controlling the symptoms.

An analysis of the voluminous studies which has been made upon ileus is somewhat confusing because of the contradictory statement made by different investigators when engaged upon the study of the same phases of the problem. It may seem rather commonplace to state that successful treatment of ileus depends upon an early diagnosis. Until an early diagnosis is made the mortality will not be reduced. In order to make a diagnosis one must visualize what may occur in the abdomen, and this emphasizes the need of a definition and classification of ileus. One should know thoroughly the age incidence of the different lesions, which may lead to interference with the lumen or peristalsis of the intestine.

In mechanical obstruction, providing strangulation has not occurred, a catheter should be inserted into the bowel above the point of obstruction after the obstruction has been removed. There may still be some argument concerning the wisdom of enterostomy, but one or two unfortunate occurrences will convince anyone of the value of draining the obstructed loop. A patient with obstruction dies within 24 to 36 hours following the cutting of an obstructing band. If a catheter had been inserted the possibility of absorption of the toxic material from the obstructed loop would be averted. If the case is so advanced that there is no peristalsis above the point of obstruction, naturally not much can be expected from the enterostomy.

In obstruction of the large bowel, frequently due to constricting carcinomas of the rectosigmoid junction or the sigmoid, a colostomy may be performed or a Mikulicz operation—the original or modified—may be performed. The possibility of perforation of the cecum in these cases should always be kept in mind. The insertion of a catheter into the cecum in these cases is not infrequently a most valuable procedure, for it relieves gas tension and guards against the development of distention ulcers.

In any cases in which a resection is indicated, the proximal loop should be kept under control. It should be fixed in the abdominal wall so that it may be opened when indications for such a procedure arise. Control of the proximal loop is not infrequently vital in these cases.

In paralytic ileus due to peritonitis or other causes, the original lesion must receive appropriate treatment. In these cases an enterostomy is a valuable procedure. The enterostomy is preferably made in the jejunum. What the results will be is usually determined early, for if the paralysis is so advanced that there is no peristalsis to force out the contents of the loop, the ileus will proceed to a fatal termination. The stomach may have to be washed out repeatedly in order to avoid dilatation and the accumulation of the material of the distended loops which pass back into it. Hypertonic salt solution, as advocated by Haden and Orr and others, is of value and should be employed.

The tragedy of ileus is due to late diagnoses. We cannot save by surgery or other therapeutic measures those in the terminal stages of ileus. Ileus should be recognized in its early stages when the obstruction, mechanical or paralytic, can be treated by appropriate surgical procedure. We cannot expect to reduce the mortality in these cases until they are recognized and operated upon early.

This is an ancient statement, but one that may be repeated with profit and to our advantage and that of the patient even at the present time.

DISCUSSION

DR. GILBERT SEAMAN (Milwaukee): I do not rise for the purpose of discussing the paper, but I am reminded of the fact that just ten years ago today the troops of Wisconsin and Michigan were resting on the heights above the Aisne River, just having concluded a victorious battle, in which we had in the Wisconsin and Michigan division more than 4,000 battle casualties, of which I sent to Colonel Lewis at his hospital more than 1,600 transportable cases. The more desperate cases had been operated on the field but they were comparatively few. Of those 1,600 cases, Dr. Lewis, with his force, operated upon more than 1,100. Ten days after that, on investigation it was discovered that there had been only sixty-seven deaths in the more than 1,100 cases that he handled. (Applause.)

I think that is a chapter in military surgery which we had never up to that time equaled. And I cannot refrain from paying tribute to Dr. Dean Lewis. He is an honorary member of this Society. If I mistake not, he is an honorary member of the alumni of the University of Wisconsin. If there is any man living, in my opinion, who is so entitled, he is entitled to perpetual freedom of the state of Wisconsin, and I am very glad at this time to pay this tribute to Dr. Lewis. (Applause.)

Roentgenographic Examination of the Right Upper Abdominal Quadrant; Indications For*

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My purpose in this short paper is to emphasize the importance of roentgenographic examination in the diagnosis of some of the more important diseases in the right upper abdominal quadrant and its consequent value as an aid in differential diagnosis. We are so often reminded of the need for a careful differential diagnosis when we see, for example, multiple scars on the abdomen of a patient suffering from a gastric crisis in locomotor ataxia. In such a case operation has usually been performed for suspected ulcer of the stomach or for gall-bladder disease. Again, in one-third of all the cases of hydronephrosis of the *right* kidney the patient has had at least one exploratory operation before a diagnosis has been made, and even at operation the correct diagnosis has seldom been revealed.

In a group of important organs so closely associated as are those found in the right upper abdominal quadrant, a differential diagnosis must of necessity be difficult. The disease may be in one organ, and the symptoms may be referred to another. Let us consider the more important lesions which may occur in this area and determine which are suitable for roentgenographic study, and also what we can hope to learn by such an examination.

DUODENAL AND GASTRIC ULCER

The diagnosis of gastric and duodenal ulcer is now left almost entirely to the roentgenologist. He is expected to determine not only the presence but also the location of the ulcer, together with the presence or absence of obstruction—a finding which may aid very materially in determining the plan of treatment to be followed. In our experience, in nearly half of the cases referred for roentgenographic study because of what seemed to be a rather definite history of ulcer, no ulcer has been found. It is, therefore, our opinion that a roentgenographic examination is the most important factor in the diagnosis of duodenal or gastric ulcer, and we feel that treatment for such a condition should never be undertaken without such an examination. (Figs. 1 and 2).

DIVERTICULA AND OTHER ANOMALIES OF THE INTESTINE

These lesions are somewhat rare, but many times they are the cause of symptoms referable to the right upper abdominal quadrant, and they are seldom recognized. A congenital band is sometimes found to be attached to the second portion of the duodenum and holding the duodenum extremely high in the right upper abdominal quadrant. (Fig. 3). If visceroptosis develops, such a band—by causing mechanical interference with the emptying of the duodenum—is capable of producing symptoms simulating gall-bladder disease or ulcer. True diverticula of the duodenum are rare, but they do occur (Fig. 4), and if there is retention and inflammation, the very serious condition of diverticulitis develops. The presence of either of these conditions may readily be determined by a careful roentgenographic examination of the gastrointestinal tract. Other anomalies, such as appendices epiploicae and Meckel's diverticulum, may also give rise to symptoms, but they are very rare, and are practically never recognized except at exploratory operation.

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Fig. 1. Roentgenogram showing duodenal ulcer with crater.

Fig. 2. Roentgenogram showing gastric ulcer with crater on lesser curvature of stomach.

DILATATION OF THE DUODENUM

Another condition which may be present in the gastrointestinal tract and should always be borne in mind when a search is being made for the cause of symptoms, is that of dilatation of the duodenum. (Fig. 5). This may be caused by the congenital bands which we have already mentioned, by obstruction at the ligament of Treitz, or by a lesion of some kind in the small bowel which obstructs the duodenum. The cases with which we most frequently have to deal are those in which there is an obstruction at the ligament of Treitz. This is a mechanical obstruction and is evidenced by acute attacks of distress, vomiting and headache —the so-called bilious headache which is usually attributed to the liver. The characteristic features of these attacks are the vomiting of large quantities of bile which have been dammed up in the small intestine, and their periodicity. A roentgenographic examination is of very great value in determining the presence of this condition. It must be borne in mind, however, that the examination will usually be made between attacks, not at the time when obstruction is present, and we have to depend upon the finding of a duodenum which has been repeatedly dilated and is therefore larger than the normal. We cannot expect to find definite obstruction and retention in the duodenum. It is important to be familiar with this condition and to recognize it, for in some of these cases surgical interference frees the patient from his symptoms and makes him a useful citizen after years of suffering and incapacitation.

CARCINOMA OF THE STOMACH

The presence of a malignant growth in the stomach may many times cause quite confusing symptoms. In the older textbooks we were taught that this condition was to be diagnosed by the presence of a palpable mass in the stomach, coffee-ground vomitus and loss of weight, and the usual train of symptoms observed in cases of cancer in patients of the cancer age. However, as the result of the recent propaganda for the early recognition and treatment of cancer, we practically never see these pathognomonic signs. We are now forced to search for means of recognizing carcinoma during its early stages, and it again falls to the lot of the roentgenologist to contribute this means. The presence of carcinoma of the stomach may be detected quite easily and with a high degree of accuracy by roentgenological examination of the barium-filled stomach. (Fig. 6) Such lesions encroach upon the lumen of the stomach during their growth and produce a filling defect, while those occurring at or near the pylorus may very early cause obstruction. We have found that the history of the case is very important in the differentiation between ulcer and cancer. In the vast majority of all cases of ulcer there is a long history of symptoms, marked by intervals of quiescence and periods of marked exacerbation. This is not true of cancer. The symptoms of cancer are usually continuous and progressive and have been present for only a short period, that is, usually a period of months, while those of ulcer have usually been present for years. In general, a clinical diagnosis of early cancer of the stomach can seldom be made with any degree of certainty and in any case in which this condition is suspected

Fig. 3. Roentgenogram showing the second portion of the duodenum held high by congenital band.

the patient should have the benefit of a careful roentgenological examination.

GALL-BLADDER DISEASES

Perhaps the most confusing clinical picture is that of a typical cholecystitis or cholelithiasis, which must be differentiated from other diseases with symptoms simulating hepatic colic. It is particularly confusing if it is not followed by jaundice. A careful roentgenographic examination should be made to determine the presence or absence of gall-stones. With our present methods of examination, in a large majority of the cases the presence of gall-stones can be satisfactorily demonstrated by roentgenograms. (Fig. 7). By using the Graham method of visualization of the gall-bladder, much information may be obtained concerning function of the gall-bladder and the presence or absence of disease. (Fig 8.) This examination is followed by a study of the barium-filled stomach, which will show adhesions or a pressure deformity about the duodenum. There is also the possibility that it may show a duodenal ulcer to be the cause of the symptoms, instead of a diseased gall-bladder.

DISEASES OF THE RIGHT KIDNEY AND URETER

Disease of the kidney must always be considered as a possible cause of the symptoms, particularly when there is pain in the right upper abdominal quadrant, and this possibility cannot be ruled out simply by the finding of normal urine. Even though the urine is normal, there may be stones in the kidney or hydronephrosis may be present, and they may be the cause of the patient's symptoms. Roentgenography again plays the most important part in establishing the diagnosis. The presence of stones may usually be determined, as well as the size and position of the kidney. A pyelographic examination should always be made on the right side when there is difficulty in determining the cause of symptoms in the right upper abdominal quadrant. A stone which cannot be shown by plain films may appear as a shadow of lesser density in the ureter or pelvis. If the symptoms indicate the presence of a calculus in

Fig. 4. Roentgenogram showing diverticula of small intestine containing barium following barium meal.

Fig. 5. Roentgenogram showing dilatation of the second portion of the duodenum, with retention.

the kidney or ureter, it is never wise to rule out such a condition just because a calculus does not show on the plain films. A further study of the kidney and ureter, by means of a pyelogram or ureterogram, will reveal most of the disease conditions which are to be found in these organs, as, for example, hydronephrosis—the most frequently overlooked pathological condition in the right upper abdominal quadrant. (Fig. 9). Hydronephrosis is often due to ptosis of the kidney; the onset—in the case of women, is frequently during pregnancy, and the symptoms appear later. An aberrant blood vessel of the kidney may also cause the obstruction, or it may be due to a stricture of the ureter or to the presence of stones. In all of these conditions the urine may be normal if there is no infection.

Likewise anomalies of the kidney, such as a pelvic or ectopic kidney, a horse-shoe kidney or a bifid kidney, may give rise to symptoms and their presence may be definitely determined by roentgenography. In many cases of neoplasm of the kidney there are no pathological urinary findings; the only symptom being pain. It is important to bear this in mind, since in the absence of hematuria a tumor may not be suspected. A pyelogram of the right kidney should always be made in such cases, as it will usually reveal any deformity characteristic of tumor which may be present. In infectious diseases of the kidney examination of the urine will usually reveal albumin, pus and sometimes blood. These findings are ample indications for a roentgenographic examination of the kidney to determine the location and extent of the diseased portion. Of course, there is usually a little blood in the urine if calculi are present, but sometimes this can be found only by microscopic examination.

A careful search for calculi in the ureter should be made. Many of these ureteral calculi are too small to be discovered by the x-ray, but this type of stone usually passes quickly and the symptoms are relieved. The persistent ureteral stone may usually be discovered. In the study of suspicious shadows in the ureteral area, a stereoscopic film is usually sufficient to determine whether or not the shadow is on a plane with the ureter. However, many times the ureters are abnormally placed, particularly if ureteritis and hydro-ureter are present, so that catheterization of the ureter is usually the safest procedure in the definite identification of ureteral calculi. The shadow of the catheter may be seen to terminate abruptly at the point where the suspicious shadow is seen, showing that it has interrupted the passage of the catheter to the kidney pelvis. On the other hand, the catheter may pass the calculus. In such instances, films should be made both in the anterior-posterior and in the oblique positions, or a double exposure should be made on a single film with the tube shifted, to determine definitely whether

Fig. 6. Roentgenogram showing carcinoma of the stomach with characteristic filling-defect.

Fig. 7. Roentgenogram showing gall-stones.

or not the shadow is in contact with the catheter in the two positions. Even though there is a space between the catheter and the calculus, this does not rule out the possibility of a stone, as the ureter may be large and dilated and both the catheter and the stone may be in it. An examination of the ureter is therefore not complete unless the ureterogram has been made. This is also necessary to establish the diagnosis of stricture of the ureter, as a spasm of the ureter may obstruct the passage of the catheter at the time of examination and thus give misleading information. The positive identification of a stricture by roentgenography is only possible if ureterograms are made in a serial fashion, with a Garceau catheter passed only a short distance into the lower end of the ureter. If a consistent filling defect is found in the ureter, a diagnosis of stricture may safely be made.

Sometimes the presence of a palpable mass in the right upper abdominal quadrant accompanied by symptoms may make diagnosis very difficult. The mass may be a tumor of the kidney, or it may be a floating kidney, or a tumor outside of the kidney, for example, a retroperitoneal sarcoma. Many times such masses are simply aberrant liver lobes. Roentgenographic examination is of the utmost importance in differentiating these lesions. As we have already mentioned, a pyelographic study of the kidney will usually determine the presence of a lesion of the kidney itself. If a Riedel liver lobe is present, a plain roentgenogram of the urinary tract including the liver will show the liver shadow to be continuous, and separate and distinct from the kidney outline. A Riedel lobe is most often mistaken for a floating kidney. A ureterogram is helpful in determining the presence of retroperitoneal tumors, which usually displace the ureter to a noticeable degree toward the midline. This displacement may also be caused, however, by a large tumor of the kidney, so that it cannot be considered as positive evidence of the presence of a retroperitoneal tumor.

CHRONIC APPENDICITIS

Another possibility which must be considered, and a very important one, is that the disturbance may be caused by a retrocecal appendix, or the appendix of a non-rotated caecum, which may lie high in the right upper abdominal quadrant and thus give a very atypical picture of chronic appendicitis. Following the examination of the stomach, a study of the appendix may be very easily made by means of a 24-hour examination of the colon. This will often reveal a filled appendix, and will show it to be adherent. (Fig. 10). It will also show its location and will visualize it definitely so that tenderness to palpation in this area can be correctly interpreted. In some cases, of course, the appendix may not be visualized, and this need not necessarily be due to the presence of a pathological condition, but it may be the result

Fig. 8. Cholecystogram showing the visualized gall-bladder which is exerting pressure on the duodenum and stomach.

of the anatomical construction of the opening into the appendix. The opening may be occluded by a Gerlach's valve, which will prevent its filling, even when the appendix is normal. A colon enema also is often helpful in determining the exact location of the cecum. With this definite visualization we can palpate the area adjacent to the cecum, and it will give us very direct evidence of the presence or absence of a tender point in the region of the appendix, and whether or not the appendix is located in the upper or in the lower right abdominal quadrant.

DISEASE OF THE CECUM

Certain lesions of the caecum must also be considered in such a differential diagnosis. The most important of these are a malignant growth and tuberculosis. A malignant growth of the colon may frequently be found at the hepatic flexure of the colon. In its early stages it may cause very indefinite symptoms, it is usually accompanied by pain and a mass can seldom be palpated at this period. Tuberculosis of the caecum usually involves the entire caecum and is most often accompanied by pulmonary tuberculosis. If either of these lesions is present the roentgenographic findings will be quite characteristic. A roentgenological examination of the right upper abdominal quadrant can therefore seldom be considered complete until the colon has been definitely identified and it is shown to be free from filling defects such as are seen in cases of malignant growth and tuberculous colitis.

DISEASES OF THE SPINE

The common diseases of the spine which may give rise to symptoms referable to the right upper abdominal quadrant are infectious arthritis, tuberculosis, sarcoma of the vertebrae, extensive hypertrophic arthritis, fracture of the vertebrae and metastatic malignant growth. These conditions can all be readily diagnosed by the aid of roentgenograms of the spine, particularly if they have advanced to the point where they cause persistent pain. Sarcoma is a destructive lesion of the body of the vertebra and of the lateral process, and the cortex of the bone is usually found to have been swept away. Infectious arthritis is a joint lesion which usually involves two vertebrae and destroys the intervertebral spaces. It compresses the adjacent vertebrae and causes kyphosis. Fracture practically always causes a compression of one vertebra and lateral deviation of the spine.

Fig. 9. Roentgenogram showing hydronephrosis of the right kidney.

This may be explained by the fact that the spine would seldom be exactly perpendicular at the time the trauma occurred. Metastatic malignant growth in the spine may in its early stages cause pain even though no definite evidence of its presence can be determined by roentgenological examination. However, as soon as any destruction has taken place and has changed the density of the bone, then the roentgenographic findings are positive. In all cases in women who have had previous operations for cancer of the breast, a spinal metastasis may be suspected in the presence of pain and rigidity in the region of the lumbar spine. Hypernephroma of the kidney metastasizing to the spine may cause a very marked degree of destruction, while the primary tumor of the kidney may be so small as to be difficult to recognize. On the other hand, a huge hypernephroma of the kidney may produce no definite metastasis. It is well always to bear in mind the possibility of spinal metastasis from a primary malignant growth, and especially in the case of a patient who has previously had a malignant disease, this possibility should always be ruled out if the symptoms indicate the presence of a lesion in the spine.

SUBDIAPHRAGMATIC PLEURISY

Subdiaphragmatic pleurisy is usually an acute process and one that is difficult to diagnose. However, fluoroscopic examination of the chest will show the fixed diaphragm and many times will reveal the presence of some fluid above the dia-

Fig. 10. Roentgenogram showing a barium-filled retrocecal appendix fixed by adhesions.

phragm, which will be helpful in determining this diagnosis.

In the diseases which we have discussed, peptic ulcer, diverticula and other anomalies of the intestine, dilatation of the duodenum, carcinoma of the stomach, gall-bladder disturbances, diseases of the right kidney and ureter, appendicitis in a retrocecal appendix, malignant tumors and tuberculosis of the cecum, various diseases of the spine and subdiaphragmatic pleurisy, we have found that roentgenography is of invaluable aid in making the diagnosis. There is a group of diseases, however, which may come under consideration, in which roentgenography is of little help. These are: locomotor ataxia with gastric crisis, angina pectoris with pain referred to the right side, herpes zoster in the right side, and pancreatitis. These last four conditions, however, usually give rather characteristic clinical pictures and I feel that if they are considered and the patient's condition is carefully analyzed, they may usually be ruled out.

DISCUSSION

DR. F. GREGORY CONNELL (Oshkosh): Mr. President and Members of the Society: Dr. Nichols has covered this paper so completely in his remarks and his demonstration that there seems little left for the discusser but to attempt to re-emphasize some of the points he has brought out.

This can probably be best done by presenting one single case and showing the help that one may get from the x-ray in obscure abdominal conditions.

A generation ago we learned about abdominal pathology by attending autopsies where we studied the remote and final result of disease. More recently we have learned earlier pathology of abdominal diseases, through laparotomy.

Since we have had an opportunity to study the abdominal viscera with the x-ray, we may learn many valuable points relative to abdominal diseases. At laparotomy one does not learn much about the physiology of the organs for the reason that the patient is abnormal due to the anesthetic and the opening of the abdomen.

With x-ray examinations the conditions are more nearly normal, the abdomen is closed; the patient is not under an anesthetic; and the findings may be of great value.

Dr. Nichols' title is possibly a little misleading. It might be construed that he considers a study of the upper right abdominal quadrant all that was necessary in certain cases. I find very frequently that incomplete gastro-intestinal and x-ray abdominal studies are made, only one organ or one region is studied. Such an incomplete examination will lead to many diagnostic pitfalls.

In a study of the right abdominal quadrant it is also necessary to study the entire abdomen and its viscera, the thorax and the spine. Very often the stomach alone is studied, or the colon by an enema only is studied, and in this way remote but related pathology is overlooked. Even the x-ray examination of the whole abdominal tract is not sufficient to justify diagnossis.

We frequently hear of "x-ray diagnosis"; it is, of course, a misnomer. The diagnosis cannot be based alone upon an x-ray. The diagnosis calls for other laboratory data; it calls for a complete physical examination, and, of the utmost importance, it calls for a complete, well-developed history. The importance of the x-ray examination of the abdomen should be emphasized. It is used very often, but I find it is most frequently used after unsatisfactory results. The x-ray examination of the abdomen should be made before and not after a laparotomy in any abdominal cases at all obscure.

In an attempt to re-emphasize what Dr. Nichols has presented to you, I would like to show some slides of one case. This case was in the hospital when I received the invitation to open this discussion. A well-developed young woman of thirty years of age who for many years had very vague and indefinite abdominal symptoms consisting of gas and so-called indigestion.

At our first x-ray examination we found a shadow; by pressure on the abdomen it was movable from one side of the spine to the other, showing that it was not attached to bone. I might say incidentally the vaginal examination showed it was not a high displaced calcified ovarian cyst. Various x-ray examinations showed that this mass was not in the stomach; that it was not in the small bowel; that it was not in the large bowel; that it was not in the gall bladder, and that it was not in the kidney.

On the strength of these very positive x-ray exclusions we made a diagnosis of a calcified mesenteric cyst, which at laparotomy proved to be correct.

Proper x-ray examinations, correctly interpreted, may often prevent incorrect diagnosis and misdirected treatments.

Chronic Nephritis; A Correlation of the Syndromes and Pathological Lesions*

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For the physician managing patients with nephritis, it is necessary to have in mind a classification of the disease that will show as fully as possible the correspondence existing between the morphological changes in the kidney and the clinical symptoms. It is essential to be able to visualize from the clinical picture the nature of the changes going on in the kidneys; because the various forms of renal diseases are characterized clinically by entirely diverse courses, and consequently they differ greatly in prognosis and call for different methods of treatment. Although there is not always an exact correspondence between the clinical picture and the pathological changes found in the kidney, the conformity is close enough as a rule to attempt a correlation of the two.

For the purpose of uniformity, I shall group the numerous and varied symptoms of all forms of chronic nephritis into five syndromes. I shall not attempt here to discuss fully the individual syndromes. The pathological lesions will be classed according to the histological changes found on microscopic examination. Three histological elements are chiefly concerned in carrying on renal function; they are: (a) the glomeruli, (b) the tubuli contorti, and (c) the smaller arteries and arterioles of the kidney. Each of these elements may become separately diseased; but oftener all are involved, with one or the other element predominantly deranged. This form of classification has been popularized especially by Volhard and Fahr (1) and is accepted as the best in use at the present time.

It is conceded that the ideal classification would be one based on etiological factors, but this is impossible at present because the exact causes of the different forms are unknown.

THE SYNDROMES

The symptoms of nephritis are so numerous and varied, that unless one has in mind some grouping for them, considerable confusion will often arise in evaluating their importance in diagnosis, prognosis and treatment. Undoubtedly, a cause of much misunderstanding in diagnosis of the types of nephritis lies in the fact that the symptoms often are transient. This is well illustrated in cases of characteristic glomerulo-nephritis which six months later predominantly display the signs and symptoms of lipoid nephrosis, and again after a year or two exhibit findings of glomerulo-nephritis which may prevail for a long period.

Such observations have led to the grouping of clinical symptoms into five great syndromes, as follows: (a) the urinary syndrome, (b) the nitrogen retention syndrome, (c) the hypertension syndrome (d) the edema syndrome, and (e) the uremic syndrome. The individual patient may present all the syndromes at one time; or he may have any single one, or any possible combination of the five. Sometimes certain syndromes dominate the clinical picture for a short time then fade away and never return. It is this inconstancy of the syndromes that has made the proper interpretation of the clinical picture difficult.

It is only when the physician knows which of the syndromes existed in the past, and which are operative at present that he can properly diagnose the kind of a renal lesion at work. Supplied with this knowledge, the prognosis and treatment follow in logical sequence.

There are those, it is true, who maintain, and probably correctly too, that the correlation of clinical and pathological signs is not always possible. Granting that this correlation is not possible in every case, it is possible in a number of cases. This number increases with more exact knowledge of the clinical syndromes from the beginning of the disease and with a more careful evaluation of the existing syndromes at the time of observation.

(A) THE URINARY SYNDROME

Of all the syndromes this is the most valuable, for it is the most constant and the earliest one to manifest itself; while it invariably is the last one to disappear during a period of quiescence. The study of this syndrome requires no elaborate laboratory equipment. It can be done very often with practically no expense to the patient and it takes but very little time. The physician can do it himself as it requires no special post graduate course to master the technic. The more one studies this syndrome, the more he will know about the kidney. Unfortunately, it is the most often neglected

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in general practice. Other more expensive laboratory procedures, temporarily at least, seem to have overshadowed the simple scrutiny of this syndrome. This syndrome is made up of the pathological changes of the urine in nephritis. Modifications of quantity, specific gravity, color, and the presence of albumin, casts, red cells, pus cells and lipoids are the chief features. The individual components may be present or absent depending upon the type of renal changes involved. It is especially important to measure the output of urine and compare the day's quantity with the night's, for it is known that early in the disease, the quantity at night may exceed that of the day. The determination of the specific gravity of several specimens during the day often reveals valuable information, as the specific gravity is a test of the concentration ability of the kidney. A lack of ability to concentrate solids in the urine is one of the very earliest and most reliable signs of renal insufficiency. Although albuminuria does not necessarily mean that nephritis is present, it calls for a careful examination of the patient to exclude nephritis. A continuous or recurring albuminuria with blood cells and casts usually indicate a renal disease. With heart failure there is often albumin with some blood cells and casts in the urine, but these elements disappear when cardiac compensation becomes established. If the albuminuria with the cellular components persists, after other evidences of heart failure have subsided, it may be confidently stated that the kidneys are diseased. Sometimes it is difficult to decide whether one is dealing with a urinary syndrome of nephritis with edema, or with heart failure and congestion of the kidneys. In such cases a polaroscopic examination of the urinary sediment reveals doubly refracting lipoids in the nephritic case, while none is found in the heart case. Repeated microscopical examination of the urine is important in determining, by the number of casts and cells found from time to time, whether the renal disease is progressing or subsiding. The urinary syndrome of nephritis may vary to some extent in intensity, but it does not disappear as a rule until quiescence has taken place.

(B) THE NITROGEN RETENTION SYNDROME

The non protein nitrogen of the blood normally ranges from 25 to 40 mg. per 100 c.c. The urea n. ranges from 10 to 20 mg. per 100 c.c. When the N. P. N. in the blood rises to 60 mg. per cent and remains elevated for a time, the nitrogen syndrome is said to be present. It is assumed with the retention of the N. P. N., that there are other unidentified toxic bodies also retained; and it is believed by some that these unrecognized substances are responsible for some symptoms of this syndrome. Nitrogen retention may not occur until the renal damage is well developed.

Other conditions than nephritis may at times cause nitrogen retention, so that this syndrome is not as specific for nephritis as the urinary syndrome. Infections, for example, pneumonia, or empyema, and other diseases causing a break down of tissues may increase blood nitrogen. Obstruction to the urinary flow will cause a rise in the nitrogen of the blood. There are extra renal factors found in the course of nephritis that occasionally modify the nitrogen retention syndrome. Heart failure with subsequent oliguria is one of the commonest of these factors. The excretion of nitrogen depends on the urine excretion, which in turn is dependent in part upon the circulation; and therefore, heart failure causes a rise of nitrogen in the blood. Occasionally urea concentration power of the kidney is present and there is no nitrogen retention in the blood, because the kidney compensates for loss of concentration by an increase of urinary output which keeps the blood nitrogen nearly normal. And again the blood nitrogen may be elevated while the output of nitrogen is practically normal, indicating that the kidney will not respond to a normal head of blood nitrogen; but a normal response follows an elevation of the blood nitrogen. Too much reliance in diagnosis and prognosis is often placed upon this syndrome, while too little attention is given to others, especially the urinary.

While the interpretation of the nitrogen retention syndrome is often difficult, it must be emphasized that in the presence of nephritis, retention of nitrogen is an important finding. Certain of the nephritides are distinguished by a rise in nitrogen; while others, notably the nephroses, are characterized by its absence. The nitrogen retention syndrome is transient, and the evaluation of it requires frequent repetitions of blood analysis to determine whether the nitrogen content is changing. This is important, because an elevation may be present for a time and then in a week or two it may subside and never return again. For the purpose of prognosis and treatment, this syndrome is val-

uable, because a high nitrogen retention, that continues high and gradually rises over a period of several weeks is an ominous sign, and indicates that more vigorous treatment is needed; while, on the other hand, if the nitrogen is high and begins to decrease gradually the outlook is good and the treatment is satisfactory.

The individual symptoms of the nitrogen retention syndrome are numerous and may not run parallel with the height of the nitrogen retained in the blood. There is considerable uncertainty respecting them. For example, moderate degrees of retention may be attended by severe gastro-intestinal symptoms marked by nausea, vomiting, pain, and diarrhoea; while a greater degree of elevation may be unaccompanied by any gastro-intestinal upsets. Other symptoms commonly found are dyspnoea, mental derangements, purpura, pruritus, and epistaxis. Pericarditis of the fibrinous type is frequently seen in this syndrome. It usually means that the end is near, although it is by no means always a sign of approaching death. Some patients have survived the attack of pericarditis for a number of years.

The symptom complex of uremia usually is discussed under the syndrome of nitrogen retention; but since the concept of uremia has changed in recent years, it seems best to consider it separately. Formerly the term uremia indicated a retention of urea and other nitrogenous substances, while now it is recognized that a definite type of uremia may occur unattended by retention of any of the nitrogenous products.

(c) THE HYPERTENSION SYNDROME

Frequently during the course of chronic nephritis the chief sign may be the coexisting high blood pressure. The hypertension in these cases evidently is caused by the nephritis and it occurs in the group classed as diffuse glomerulo-nephritis. This hypertension may be present at times when all other syndromes have subsided; and it may be absent during a period when other syndromes are fully developed. There is another type of hypertension commonly called primary or essential hypertension that is not caused by kidney disease, and often becomes confused with nephritic hypertension. The modern concept of hypertension implies that there is an increased arteriolar spasm produced by a generalized vasoconstriction resulting in an increase of peripheral resistance with subsequent elevation of the blood pressure. The theory that the hypertension enhances the vascular changes already initiated by some unknown causes is expressed today as it was by Johnson (2) many years ago. With diffuse glomerulo-nephritis, either acute or chronic, hypertension usually occurs but not always. Hypertension is not an obligatory finding in glomerulo-nephritis.

Primary hypertension is associated with sclerosis of the renal arterioles in 90 per cent of cases, and in about 10 per cent of these renal insufficiency with true uremia develops. A long debated question in dealing with this type of disease is whether the hypertension precedes arteriosclerosis or whether the arteriosclerosis produces the hypertension. Many, for example, Keith (3), Bell and Clawson (4), and others, favor the opinion that the hypertension comes first in these cases. Ophuls (5) suggests that some toxic substance is responsible for the hypertension and at the same time causes the changes in the kidneys and blood vessels. For practical purposes, primary hypertension may be separated in two great classes: (1) the benign, and (2) the malignant. It cannot be denied that these terms do not connote sharply defined conditions; for it is difficult to see why a patient with so-called benign hypertension, who suffers from an epileptic stroke and dies, has any less a malignant condition than some of those to which the term malignant is applied.

(1) THE BENIGN TYPE

Clinically the benign hypertension develops insidiously and may cause little or no inconvenience to its bearer for many years; in fact, the patient may live a normal life time and die of some intercurrent disease unassociated with the hypertension. Among the symptoms that may occur are headache, lack of endurance, failure of memory and dizziness. Coronary or cerebral sclerosis are likely to follow. As a rule, though, one or more of the following complications develop: heart failure, cerebral hemorrhage, and renal failure. Patients may be seen with all three disorders. Leaving out intercurrent diseases that may cause the death of the patient, about 50 per cent die of heart failure, 40 per cent of apoplexy, and 10 per cent of renal insufficiency. The heart becomes greatly hypertrophied usually weighing above 500 grams. The enlargement in these cases is a very important diagnostic sign. When the heart is found to be greatly enlarged with hypertension, in the absence

of valvular defects and adherent pericardium, it may be assumed that the elevated blood pressure is one of long standing. It is to this class that the term, "Tell Tale" heart is applied. Evidences of heart failure, as cyanosis, liver engorgement, pulmonary edema, precordial distress, and dyspnoea are fairly reliable signs differentiating this type of hypertension from that found with glomerulo-nephritis. Anemia is not a feature of primary hypertension, while it is a constant finding with glomerulo-nephritis.

(2) MALIGNANT HYPERTENSION

The term, malignant hypertension, was applied by Volhard and Fahr (1) to cases where renal insufficiency developed in the course of primary hypertension. They pointed out that this occurs in ten per cent of such cases and that the individuals die in true uremia. Keith (3) assigns a different class of hypertensive cases to the group he designates as the malignant hypertension. He finds in a certain group of hypertensive (primary) individuals a high and persistent blood pressure, a characteristic retinitis, a rapid course, and a diffuse wide spread disease of the arterioles. He indicates that such patients may die of renal failure, cardiac failure or cerebral disease.

It is seen, then, that the hypertension syndrome may vary depending upon the type of disease with which it is associated. When it is found in conjunction with chronic glomerulo-nephritis, it ranges around 180/100; and headache, dyspnoea, and pulmonary edema most frequently accompany it. Vertigo, epistaxis, and at times, apoplexy, polyuria and nocturia often reveal themselves. When high blood pressure occurs with glomerulo-nephritis, it is often difficult to decide whether the symptoms are due to it, or to some concomitant syndrome. The heart in glomerulo-nephritis is found only moderately hypertrophied, and a definite anemia is present. The patient with nephritic hypertension as a rule dies of uremia and not of apoplexy or heart failure. With chronic glomerulo-nephritis, hypertension is considered a favorable sign for should it drop, the urinary output would diminish and the excretion of waste products become reduced.

(D) THE EDEMA SYNDROME

This is the least constant of any of the syndromes. Often it is the first one to be detected, and after a period of a few weeks or months it goes away and never returns. Other times it may return at irregular intervals varying from a few weeks to several months. This periodicity is especially found in cases of pure lipoid nephrosis, Murphy and Warfield (6). Edema is the cardinal symptom of lipoid nephrosis. It occurs also in chronic glomerulo-nephritis with lipoid degeneration of the tubules. It is not simply degeneration of

CHART I.

			URINARY							HYPER-TENSION	EDEMA	NITROGEN RETENTION	UREMIC
			ALBUMIN	OLIGURIA	HYPO-STHENURIA	RBC	WBC	CASTS	LIPOID DR				
NEPHROSIS		LIPOID	XXXX	XX	NEG.	NEG.	X	X	XXXX	NEG.	XXX	NEG.	NEG.
NEPHROSIS		CHEMICAL	XXXX	ANURIA XXXX	NEG.	XXX	XXXX	XXX	NEG.	X	X	XXX	XX
NEPHROSIS		SIMPLE FATTY	XX	NEG.	NEG.	NEG.	NEG.	XX	NEG.	NEG.	NEG.	NEG.	NEG.
NEPHROSIS		AMYLOID	USUALLY SAME AS LIPOID NEPHROSIS										
GLOMERULO-NEPHRITIS (Chronic)	DIFFUSE	WITHOUT LIPOID DEGENERATION OF TUBULES	XXXX	XX	XX	XXX	XXX	XXXX	NEG.	MODERATE 170/110	NEG.	XXX	CONVULSIVE OR TRUE
GLOMERULO-NEPHRITIS (Chronic)	DIFFUSE	WITH LIPOID DEGENERATION OF TUBULES	XXXX	XX.	XX	XX	X	XX	XXXX	MODERATE XXX	XX	XX	CONVULSIVE OR TRUE
GLOMERULO-NEPHRITIS (Chronic)	FOCAL	EMBOLIC	XX	NEG.	NEG.	XXXX	XX	X	NEG.	NEG.	NEG.	NEG.	NEG.
GLOMERULO-NEPHRITIS (Chronic)	FOCAL	NON EMBOLIC	XX	NEG.	NEG.	XXX	XX	NEG.	NEG.	NEG.	NEG.	NEG.	NEG.
RENAL ARTERIOLOSCLEROSIS		WITH NO RENAL FAILURE	0-X	POLYURIA	XX	X	X	NEG.	NEG.	XXXX	NEG.	NEG.	NEG.
RENAL ARTERIOLOSCLEROSIS	WITH RENAL FAILURE	SLOWLY PROGRESSIVE	XXX	X	XXXX	XX	XXX	XX	NEG.	XXXX	NEG.	XXX	TRUE XXXX
RENAL ARTERIOLOSCLEROSIS	WITH RENAL FAILURE	RAPIDLY PROGRESSIVE	XXX	XX	XXX	XX	XX	XXX	NEG.	XXXX	NEG.	XXX	TRUE
RENAL ARTERIOLOSCLEROSIS		INTERSTITIAL	0-XXX	ANURIA	NEG.	0-XX	0-XX	NEG.	NEG.	NEG.	NEG.	XXX	NEG.

the tubes that is associated to edema in chronic glomerulo-nephritis but a special type of tubular degeneration, namely, a lipoid (cholesterol-ester) degeneration, (7). Edema is usually not a troublesome symptom in nephritis. It is in pure lipoid nephrosis that edema becomes very extensive, and the patient is bed ridden for a time because of the enormous swelling. A feature deserving special mention is the fact that this dropsy subsides rapidly and entirely and appears to come and go in spite of, and not because of treatment. It would look to a casual observer that some special form of treatment influences the edema; but prolonged observations over a period of years, in one case, proved the ineffectualness of diuretics or any other special procedures. The edema associated with renal disease may be sharply distinguished from that caused by heart failure. The former is a generalized type occuring in the morning and increasing during the day. Heart failure edema is very responsive to treatment, a feature sharply contrasting it with stubbornness to treatment of nephritic edema. The edema syndrome of nephritis is said by Widal (8) to be caused by salt retention. This view has not been universally accepted. It is shown by Leva (9) that salt may be retained with no consequent edema. Renal edema may develop in the lung or in the glottis, and sometimes the uvula becomes enormously swollen. These are unfavorable sites for the development of edema and may lead to serious complications.

(E) THE UREMIC SYNDROME

Most types of renal disease are complicated sometime during their course by uremia. Usually uremia is classified according to some leading symptom so that the dyspnoeic, the gastro-intestinal, the typhoid, the comatose, and the convulsive types have been recognized. Some of the ambiguity of the term uremia disappeared with the separation of the convulsive uremia from the true uremia. The latter is caused by retention of metabolic products of which urea forms a greater part. This type is seen when anuria develops from a bilateral ureteral block, removal of both kidneys, pyelonephritis, as well as in cases of chronic nephritis. Anorexia, vomiting, stomatitis, pruritus, purpura, colitis, dyspnoea, Cheyne-Stokes' breathing, and coma, are common findings with the true type. The outlook in this type is very poor. Most of the symptoms occurring in the true type of uremia have been described in discussing the nitrogen retention syndrome. The exact cause of symptoms is not known, but undoubtedly it is closely related to nitrogen retention.

In sharp contrast to the true type of uremia there is another type in which there may be no substantial elevation of nitrogenous products in the blood. To this group belong cases of uremia with convulsions. The cause of the symptoms is unknown. It is assumed to be the result of cerebral edema producing pressure on the brain with a resultant anemia of the brain. Ischemia of the brain brought on by vascular spasm of brain arterioles is considered by some observers to be the cause. It is held that the elevated blood pressure usually present is an expression of generalized vasoconstriction and that the cerebral arterioles are not exceptions to the rule. Among the chief symptoms are mental confusion, convulsion, aphasia, transient hemiplegia, amaurosis, and headache. In contrast to the true type, the convulsive type frequently occurs with great suddenness. A point of further distinction is that prognosis in the convulsive type is much better than in the true type. The convulsive type of uremia occurs in glomerulo-nephritis and in lipoid nephrosis; it is not seen in cases of renal arteriosclerosis with renal insufficiency. The two types of uremia may occur in the same individual; this is found to be true for example, in chronic glomerulo-nephritis.

THE PATHOLOGICAL CLASSIFICATION

Under older classifications those cases showing edema and a heavy albuminuria with slight retention of nitrogenous products would be classed as chronic parenchymatous; while those with no edema but with an excessive retention of nitrogenous products in the blood and a great elevation of the blood pressure would be placed with the chronic interstitial type. Since it is evident that the term parenchymatous may be applied equally as well to either lipoid nephrosis or chronic glomerulo-nephritis with edema, and that the term interstitial may be applied to either chronic glomerulo-nephritis without edema or renal anteriosclerosis, it seems best to lay aside these older terms. In all newer classifications they have been dropped. Modern classifications are based upon changes occurring in the tubules, glomeruli, and arteries, so that the following corresponding divisions are recognized: (I) nephrosis, (II) glomerulo-nephritis, and (III) renal arteriosclerosis.

(I) NEPHROSIS

The term nephrosis was invoked by Von Mueller (10) in 1905 to separate the apparently degenerative from the evidently inflammatory lesions of the kidney. This distinction has not been accepted without considerable criticism from many quarters, chiefly from his own German colleagues, Löhlein, Aschoff, and others; but evidently it has come to stay. There are good grounds for the distinction. In nephrosis the lesions are degenerative and even if of necrotizing character, as after bichloride of mercury poisoning, the tubular epithelium regenerates promptly. A great deal of the opposition to the term nephrosis comes from pathologists, some of whom believe that the degenerative processes seen in the tubular epithelium are only a phase of inflammation. This is an old argument and undoubtedly will not be settled very soon.

Some confusion has arisen from the improper use of the term nephrosis. It is to be remembered that nephrosis is a general term and that there are several types of nephrosis. (Lichtwitz (11) Munk (12). For example, there is a chemical nephrosis produced by mercuric chloride, and amyloid nephrosis, a hyaline nephrosis, a fatty (simple) nephrosis, and a lipoid nephrosis. It is clear then that an adjective indicating the type under study must be used. It is the lipoid nephrosis that is commonly meant when the term nephrosis is used. Lipoid nephrosis is different from the others in that there are lipoids (cholesterol-esters) present in the tubular epithelium and in the urine found on examination with polarizing microscope.

For practical purposes it may be confidently stated that there is a kidney disease distinguished by changes limited exclusively to the tubules; and that these changes are characterized by lipoid deposits in the tubular epithelial cells; while the blood vessels and glomeruli appear normal. There is a definite clinical picture that coincides with the pathological findings. Clinically the urinary and edema syndromes are well established, while the nitrogen retention and hypertension syndromes are absent. There is a heavy albuminuria with very few or no red blood cells or casts and only a few pus cells. Doubly refracting lipoids are found. A striking feature is that the albuminuria persists for years when the patient is otherwise seemingly perfectly normal. There is usually an abundant edema which is cyclic in nature, and which after a few attacks may disappear and never return. This edema is refractory to diuretics and comes and goes at times despite vigorous treatment aimed at controlling it. Among the other features of this disease are the hypercholesterolemia and the decrease of blood proteins with an inversion of the albumin globulin ratio. The blood cholesterol may rise from the normal 150 mgs. per 100 c.c. to 800 mgs. per 100 c. c. There is apparently no coincidence of the degree of edema with the height of the blood cholesterol. The most important reason for separating the lipoid nephrosis from the other forms of nephritis lies in the fact that with nephrosis there is a very good prognosis. Such patients may live a normal lifetime. A review of the older literature discloses many cases of lipoid nephrosis described under various names. Johnson (2) gave a good description and commented on the good prognosis. Among the reports on the large white kidney by Wilks (13) are some cases that would now be called lipoid nephrosis.

(II) CHRONIC GLOMERULO-NEPHRITIS

(1) DIFFUSE

It is assumed that this form of nephritis is caused by toxins, especially those of streptococcal groups. The lesion is generally diffuse, that is, all the glomeruli are affected. All evidences of the inflammatory nature of the lesion are present, although the exudative, proliferative, and degenerative responses may vary in degree of severity. The tubular apparatus becomes extremely involved. Its epithelial cells become swollen and undergo fatty changes and desquamation. During the earlier stages of the disease the kidney is large and may be red, mottled, or white, depending upon the extent of hemorrhage, fatty degeneration and ischemia. Glomerulo-nephritis is a progressive disease, although periods of quiescence alternate with activity. In time many glomerular tufts are obliterated by connective tissue which contracts and produces the secondary contracted kidney. A uniform contraction of the entire organ results. Frequently the surface is fairly smooth; in other cases the cortex presents a characteristic granular exterior. The granules may be of the small sized or finely granular variety, and they may be of the larger type resulting in the so called coarsely granular kidney. Clinically the cases of glomerulo-nephritis may be divided into (a) those without lipoid involvement of the tubules, and (b) those with lipoid deposits in the tubules.

(A) CHRONIC GLOMERULO-NEPHRITIS WITHOUT LIPOID CHANGES IN TUBULES

The chief syndromes of glomerulo-nephritis without lipoid changes in tubules are as follows: the urinary, the hypertension, the nitrogen retention and the uremic syndrome. The urinary syndrome is distinguished by albumin, many red blood cells, pus cells, casts granular and hyalin, and by the absence of doubly refracting lipoids. This syndrome is very transient. For months it may show all the features in a marked degree, and then lapse into a period of quiescence lasting for months and years and display only a small amount of albumin. The hypertension syndrome too is very unsteady. The pressure may drop to normal remaining there for months, and then rise again with no apparent change in the other syndromes for a time.

The nitrogen retention syndrome may lead all others from the beginning of trouble until the end; or there may be a mild retention, with gradually increasing amounts until it reaches high figures, followed by a fall to almost normal, where it stays during the remainder of the course of the disease. This syndrome is seldom absent. The true type of uremia is frequently found alone; at times the convulsive type is found alone. Often both types are combined. The true type of uremia develops at the end of the course of the disease and means that death is imminent, while the convulsive type, when it appears alone, has no such bad prognostic significance. The syndrome of edema is lacking in this form of glomerulo-nephritis.

(B) CHRONIC GLOMERULO-NEPHRITIS WITH LIPOID CHANGES IN TUBULES

It is known that very often a fatty change is found, brought about by deposits of simple fat in the tubular epithelial cells; these deposits have no special significance. But there is another type of fatty change produced by deposits of cholesterol-esters in the tubular cells. Such fat is readily distinguished by its double refracting phenomenon, detected by examination with the polarizing microscope. The term lipoid here is used to designate the cholesterol-ester. The presence of these lipoid deposits in the tubular epithelium in cases of glomerulo-nephritis, seems to have a special significance. For those cases of glomerulo-nephritis with edema are characterized by the presence of these lipoids in the tubular epithelial cells, while those cases of glomerulo-nephritis without edema are free from such lipoid changes. Why some cases of chronic glomerulo-nephritis have edema and others do not is an unsolved problem at present. Tubular degeneration is a part of the picture in all cases of diffuse glomerulo-nephritis. It is fair to assume that the glomeruli have been involved in so many cases of nephritis without edema, that they cannot be considered to be the chief cause of edema. This is true, likewise, with the tubules, whose extensive involvement leading to atrophy at times is not associated with demonstrable edema. What the connection is between the lipoids in the tubules and edema is not known; it is, however, a fact that there is a close association.

The syndromes produced by chronic glomerulo-nephritis with lipoid degenerations of tubules are the same as those caused by chronic glomerulo-nephritis without lipoid changes, with the exception that edema is present. It is well known that patients with the lipoid changes in tubules do not have continuous edema. The edema syndrome fluctuates in intensity, disappearing for years at a time. There is no parallelism found between the extent of lipoid involvement of the tubules and the degree of edema. For it is believed that the tubules are loaded with lipoids almost continuously while the edema may not have been in evidence for some time.

(2) FOCAL GLOMERULO-NEPHRITIS

This form differs from diffuse nephritis in that the lesions are scattered and many of the functional units of the kidney are left intact. No renal insufficiency develops and only the urinary syndrome is present. There are no casts, no lipoids, but many red cells and pus cells are found. Two types are distinguished: the embolic type, that is found in connection with diseases such as subacute bacterial endocarditis where the emboli come from the valve lesions of the heart, and the non-embolic, where the cause is not known and the patients do not die, leaving the exact nature of the trouble in an uncertain state. No other syndrome appears in this class of disease, except the urinary.

(III) RENAL ARTERIOSCLEROSIS

Herxheimer (14) employed the term renal arteriosclerosis, to describe the thickening and sclerosis of the walls of the arterioles of the kidney. Other names have been used with practically the same meaning. Councilman (15) called it diffuse arteriosclerosis. It is the arterio capillary fibrosis of Gull and Sutton (16); while Evans (17) coined the term diffuse hyperplastic sclerosis to

indicate the same condition. The synonyms, primary contracted kidney, and red granular kidney were favored by the older writers to designate the type of disease under discussion. Grossly, the arteriosclerotic kidney may show no change, but on microscopic study there are always definite changes in the arterioles. These arterioles show hyaline swelling of their walls with an atrophy of their muscular and elastic tissue. The thickening of the smallest afferent arterioles produces collapse of the corresponding glomerulus, which gradually becomes hyalinized. The rate of progress of the sclerosis of the arterioles determines to a large extent the clinical picture produced.

I do not propose to enter here into a minute inquiry or to make assessments of the merits of large amounts of histological work done on the vascular system of the kidney. Such work has been done very lately by Bell and Clawson (4). It is with the clinical history of those changes that I wish to deal at present.

As a rule renal arteriolosclerosis has in the past been recognized as a disease closely associated with hypertension and hypertrophy of the heart. The urinary findings and other evidences of kidney disease were considered to be later manifestations of the disease.

Mahomed (18) clearly described the clinical features of this disease as follows: "First the functional stage, which is limited to the condition of high arterial pressure without organic changes in either the vascular system or kidneys: Second the arteriosclerosis without nephritis, the stage of organic changes in the vascular system and in the kidney: Third chronic Bright's disease with nephritis, the natural, but by no means the invariable, termination of the disease; cirrhotic changes are extreme, and the symptoms of renal disease have become prominent." The different stages separated by Mahomed are well recognized and it is realized now as it was then that only few of the cases of the group develop signs and symptoms of renal insufficiency. The characteristic symptom of renal arteriolosclerosis is hypertension, and this causes the second prominent feature, hypertrophy of the heart. The question at present is, what relationship exists between the hypertension and the arteriolosclerosis of the kidney? It was pointed out above, that an abnormal state of contraction of large areas of arterioles is assumed to be the primary disorder. The cause of the contraction of arterioles is not known. Ultimately, morphological changes appear in the arterioles; and according to Fishberg (19) the kidney, pancreas, liver and brain become involved in the order named. In the earlier stages of the disease, wide variations in blood pressure occur; later on the pressure becomes more fixed, probably because of the anatomical changes in the vascular system.

On account of the fact that the patients of this group who develop renal failure have entirely different syndromes from those who do not develop renal failure, it seems best to separate them into two classes: (a) those with no renal failure, and (b) those with renal failure.

(a) Those cases in which there is no renal failure are exclusively distinguished by the syndrome of hypertension. There may be a slight albuminuria at times but a definite urinary syndrome does not appear. There is no nitrogen retention. When edema occurs, it is secondary to heart failure and not renal in origin. Uremia is not seen in these cases. Heart failure or apoplexy causes death. These complications need no discussion at present.

(b) The clinical picture changes entirely when renal failure develops. The hypertension syndrome persists and may become more pronounced. In addition, the urinary syndrome with heavy albuminuria, granular casts, red cells, and pus cells becomes established. At times double refracting lipoids are present in the urinary sediment. Edema occasionally develops. It may be due to heart failure or it may be of renal origin; when it is a consequence of heart failure, lipoids are not found either in the urine or in the tubular epithelium after death; while if the edema is of renal origin, the lipoids are found in the urine during life and in the tubular epithelium at autopsy. The nitrogen retention syndrome is always present and may be mild, moderate or severe. Uremia of the true type usually terminates the picture. The syndromes of renal failure in these cases may develop slowly or rapidly. When the onset is rapid and the course is short, all syndromes are more severe; while in the other cases where the syndromes develop slowly, they usually are of milder form. According to the meaning assigned to the term malignant hypertension by Volhard and Fahr (1) all the patients with renal failure in connection with renal arteriolosclerosis would be diagnosed malignant hypertension.

Bell and Clawson (2) prefer to designate only those cases of rapid and stormy course as malignant, and they claim that there are histological changes to correspond with the clinical phases. They find in cases of slow course a narrowing of the arterioles with gradual and progressive atrophy of glomeruli; while in those cases of rapid and stormy course, necrosis of the arteriolar wall is found with infarcation of the glomeruli.

It is difficult, and at time impossible, to differentiate cases in the second group from those of chronic diffuse glomerular nephritis. The kidney at autopsy in either case may be contracted and granular, and the smaller and smallest arteries may stand out like quills. On microscopic examination both may show such extensive glomerular and arteriolar involvement that one can not be separated from the other. The clinical history will often be the deciding factor. The patient with renal arteriosclerosis practically always has only hypertension and cardiac hypertrophy for years before any other syndrome develops; while the patient with glomerulo-nephritis has several syndromes from the beginning of the trouble. Anemia is a feature absent in cases of renal arteriolosclerosis and always present with chronic glomerulo-nephritis. Engorgement of the liver, cyanosis and other signs of failing heart are more commonly found with arteriolosclerosis than with chronic glomerulo-nephritis.

SUMMARY

1. An attempt is made to correlate the numerous and varied symptoms with the morphological changes of chronic nephritis.

2. The pathological classification is based upon changes occuring in the tubules, glomeruli, and arterioles of the kidney, so that the following corresponding divisions are recognized: (1) nephrosis, (2) glomerulo-nephritis, and (3) renal arteriolosclerosis.

3. The clinical symptoms are grouped into the five following syndromes: (a) the urinary, (b) the nitrogen retention, (c) the hypertension, (d) the edema, and (e) the uremic.

4. In discussing separately the pathological lesions and clinical syndromes correspondence between the two is pointed out.

5. It is emphasized that the clinical syndromes may come and go during the course of nephritis, and this inconstancy of the syndromes causes confusion at times in the diagnosis.

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Separate Kidney Function

Separate renal functions have been tested by L. C. Todd, Charlotte, N. C. (Journal A. M. A., Jan. 19, 1929), in 200 cases contemporaneously by the dye excretion (phenolsulphonphthalein) test and by the salt excretion (specific gravity) test. The differential specific gravity test has been found more accurate in the light of subsequent proved pathologic conditions. It is time-saving to the urologist and pain-saving to the patient. Of three methods of determining the specific gravities of small amounts of liquids, all of which have been used many times in clinical use and all of which are acceptable, the most practical is that of the immiscible balance, the prearranged mixtures being used in a series of 1 degree steps. Several recent improvements have been made in the technic of Todd's present method. The differential specific gravity test gives a practical estimate of the comparative functional capacity of the two kidneys and is an important part of the urologic examination, especially when any surgical procedure of the kidneys is considered.

Injuries to the Medial Ligamentary Structures of the Knee-Joint

By RALPH M. CARTER, M. D.
Green Bay

Recent years have seen marked advances in our knowledge of diseases and injuries of the various joints. Two factors have been responsible for this: first, the extensive use of the x-ray, with its present day ability to reveal changes which could not be shown with the earlier apparatus; and second, the increasing number of joint operations made possible by a perfected surgical technique, such operations enabling pathological conditions to be seen and studied in the living subject.

All this is especially true in regard to the knee-joint. Knees are frequently seen which are obviously the seat of disability: a moderate amount of effusion may be present, they may be weak, or unstable, they may be painful upon motion or palpation, other signs and symptoms may be present; nevertheless, an x-ray shows no evidence of fracture or other pathological change in bone or cartilage. To such a condition, the term "internal derangement of the knee-joint" was formerly applied. Such a designation meant just about as much as "essential hematuria" used in connection with kidney derangement. In other words, internal derangement of the knee-joint meant that there was trouble in the articulation, but that the exact nature of the trouble was unknown. In the light of our present knowledge, we are now able to diagnose injuries of the semilunar cartilages, ruptures of the crucial ligaments, etc., and the use of such blanket terminology is no longer justifiable.

Among injuries to the knee, which, if unrecognized and untreated, may give rise to a considerable degree of permanent disability, are those involving the ligamentary apparatus on the inner or medial aspect of the joint. It is undoubtedly true that slight injuries to these structures, such as overstretching or tearing of a few isolated fibers, occur very frequently, and go on to recovery without any further difficulty. On the other hand, it is likewise true that severe injuries, the importance of which in the production of permanent disability is often overlooked, may be present and unappreciated. The reason for this is because they give rise to no characteristic symptoms or deformity; after healing has occurred, pain is completely absent, the patient complaining merely of a more or less pronounced weakness or instability of the knee-joint. For this reason, in all knee injuries the possible existence of damage to the ligamentary apparatus on the internal or medial aspect of the joint must always be kept in mind, and the condition of these structures carefully investigated.

Injuries such as those under consideration usually result from the action of a force applied to the outer aspect of the extended knee-joint, which tends to bend the joint inwards; in certain cases, torsion may have a similar effect. In order for rupture or even partial tearing of the internal lateral ligament to occur, this strain must be an unusual one; in the majority of instances in which force is applied to the knee, the excessive strain is decidedly lessened by simultaneous flexion, and rupture of the ligament does not occur. However, if the knee-joint is relatively fixed in extension, the entire effect of the force is exerted upon the internal lateral ligament, which may then give way. This mechanism was well illustrated in one of my cases. A man was engaged in piling logs; a log part way up the pile suddenly started to roll down, and he was prevented from getting out of its way when his foot caught between two other logs. With the knee thus fixed in extension, he received the force on the outer aspect of the joint, and sustained a rupture of the internal lateral ligament.

If the possibility of such an injury be kept in mind in every case of knee injury in which the condition present is not obvious, the recognition of it is not an extremely difficult task. The important sign to be noted is the degree of abduction of the leg in relation to the thigh. In cases in which the internal lateral ligament is completely torn across, the tibia can be pulled laterally directly against the femur, so that the long axis of the latter bone forms an obtuse angle, open externally, with the tibia. This finding is also not infrequently capable of being roentgenologically demonstrated. In a film taken in an antero-posterior direction with the leg held at the limit of abduction on the thigh, it will often be clearly seen that the lateral joint surface of the tibia approaches more or less closely to the lateral condyle of the femur, while a correspondingly larger space exists on the medial side.

Associated with this, in recent cases, is a considerable degree of pain, which frequently renders active movement in the knee-joint impossible, and prevents all weight bearing. There is also effusion

into the joint, and the swelling may be rendered asymmetrical by the formation of an hematoma on the internal aspect of the knee. Palpation usually reveals a point of localized tenderness on the inner side of the joint at, or just above, the place of attachment of the internal lateral ligament. It should likewise not be forgotten that there is very frequently present an associated injury of the internal semilunar cartilage.

In old cases, practically the only objective finding present may be the possibility of increased passive abduction in the joint as above described, which is characteristic for the condition.

Cases operated upon have shown one of two pathological conditions: either there is present a sharp transverse tear, or the ligamentary structures are simply ravelled out, so to speak.

In appearance and mode of production, the sharp transverse tear closely resembles a rupture of the quadriceps tendon above the patella. It occurs when the knee, being firmly fixed in full extension, is acted upon externally by a sudden, excessive force, usually of short duration, as in the case above cited.

When the force is applied more gradually, and is of longer duration, the individual fibers of the ligament are stretched and torn from their attachments, and a thinning or ravelling out is produced.

In rare instances, the internal lateral ligament may be neither ruptured nor thinned out, but instead may tear loose at its bony attachment, bringing with it a small fragment of the tibia. Also, as mentioned above, multiple injuries may be present, such as rupture of one or both of the crucial ligaments, injury to the semilunar cartilages, etc.

Since the ultimate disability resulting from damage to the ligamentary structures on the inner aspect of the knee-joint may frequently be considerable, in every case of trauma to this joint, it is important to very carefully investigate whether or not these ligaments have sustained injury. This should be done by testing the possibility of abduction of the leg on the thigh; normally, such movement is practically absent. If perceptible lateral motion is present, and particularly, if an x-ray taken with the leg held at the limit of its abduction on the thigh, shows a widening of the space between the ends of the femur and tibia internally, we can be practically certain that some damage has been done to the ligaments on the internal aspect of the joint, and treatment should be instituted accordingly.

In the great majority of cases, the damage consists only in a partial tearing or thinning out of the fibers; this constitutes the so-called distortion of the knee-joint. The remaining fibers function to a large extent, but are not strong enough to withstand any strain. In such cases, conservative treatment usually leads to recovery. Such conservative treatment consists in rest and avoidance of weight-bearing and strain until sufficient time has elapsed to allow healing of the torn fibers. The important thing is to recognize that the condition is present, so that the patient may not be encouraged to use the knee too soon.

In cases with a complete tear, however, operative treatment is indicated. In recent cases, it is usually possible to suture the torn bands, or to shorten the capsule by plicating it. The results in such cases are usually good. In old cases, the Edwards operation may be performed, or in certain cases a fascial plastic done, as recommended by Brehms. Under such circumstances, the results may or may not be good, and too much should not be promised from operation.

CONCLUSION

In conclusion, let it again be emphasized that in every case of knee injury, it is imperative to test the range of abduction of the leg upon the thigh. If such abduction is possible to a slight degree, we have to do with a partial injury of the medial ligamentary apparatus, which may be treated conservatively. If, on the other hand, such abduction is presented to a marked degree, it is practically certain that a complete or almost complete tear is present, and this must be treated by operation.

Renal Back Pressure

Henry A. R. Kreutzmann, San Francisco (Journal A. M. A., Jan. 19, 1929), concludes that the cause of upper urinary tract dilatation in obstructive lesions of the bladder neck and urethra in adults is a stenosis of the intramural portion of the ureter. This constriction is due to hypertrophy of the bladder muscle. When reflux is present, the increased intravesical pressure tends to keep the upper urinary tract dilated to its maximum. After removal of the urethral obstruction, the bladder wall loses its hypertrophy, the stenosis disappears, drainage is improved and the ureters and kidney pelves return to normal.

THE JOURNAL CLINIC

Knife Blade in Left Antrum; Case Report

By J. E. MULSOW, M. D.
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B. S., colored male, age 35; prisoner, entered the Milwaukee County Hospital complaining of pain over the left side of the face and jaw especially when opening his mouth. Condition has been present for the past three months.

History: negative. General examination negative.

Nose: mucous membranes normal in color, no pus nor polypi. Septum, slight deviation to the right. Throat: tonsils small, clean; teeth in good condition. Ears: drums gray, slightly retracted.

The possibility of an impacted molar was thought of and x-ray picture requested of the left side of the head. Picture revealed foreign body in left antrum, suspected knife blade.

October 19, 1928, under general anesthesia, radical operation (modified Caldwell-Luc) was done. Examination of the antrum showed the lining mucous membrane normal, no pus nor polypi; in the roof of the antrum there appeared a ridge which extended downward, backward and outward. Incision of the membrane covering this ridge revealed the foreign body. The mucous membrane lining had been pushed down and was firmly adherent to both sides of the blade. The blade was entirely exposed by blunt dissection of the mucous membrane covering; it was firmly fixed anteriorly in the anterior bony wall and posteriorly in the pterygomaxillary wall. Considerable of the anterior bony wall of the antrum was removed in order to bring the blade downward, as the anterior portion of the blade lie immediately below the orbit. This done the blade was drawn downward and extracted with some difficulty. The blade was oxidized, quite sharp and evidently had been in the antrum for some time.

Patient made an uneventful recovery, denied any knowledge as to how the blade was acquired. The pain evidently was caused by pressure on the middle superior and posterior superior dental nerves.

Gas Anesthesia; Measurement of Positive Pressure Used in

By AMY LITTIG, M. D.
Milwaukee

Attention is frequently called to positive pressure in administration of gas anesthesia. Machines have for some time been equipped with means of limiting the maximum pressure used, so as not to over distend and injure the lungs.

In response to a need felt for knowing the exact pressure presented at any time, a new unit, known as a bag-pressure unit has been added to one of the well-known makes of gas machines. The bag itself may hang on this unit, or it may be used near the face as in the carbon dioxid absorption method. A spring gauge is operated automatically by a piston working from a diaphragm in the unit. No manipulation is added to the technics ordinarily

used in anesthesia. The dial of the gauge gives readings from 0 to 35 mm. of mercury pressure, the first 10 mm. readings over an arc of 180°. The arrow of the gauge shows a fluctuation with each respiration. The gauge gives a delicate range of readings, but is itself not delicate, and may ride constantly on the machine.

My first observance of positive pressure was in thoracic surgery where an improvised water manometer was employed to control the pressure. It worked very well in several adult patients. A child died under anesthesia by this method, with a rapidly accelerating pulse and deepening cyanosis. As an observer, it occurred to me that a stationary air column had been produced rather than that ventilation of the lungs was taking place. There seemed a need here for knowing that the elasticity of the lungs had not been exceeded. Though such had not been anticipated, the new bag-pressure unit, showing as it does the difference in pressure for inspiration and expiration, will indicate what pressures can be used and still allow sufficient fluctuation for ventilation.

For endotracheal insufflation anesthesia Doctor Waters was seen to place a sphygmomanometer dial in the path of the gas to the patient. During the anesthesia the fluctuation of the arrow and the presures were observed. This is the principle of the new unit, only that there is now a wide range of readings covering the low pressures employed.

A rubber breathing bag burst in my hands in an attempt to inflate the lungs of an infant which could not be resuscitated. The fact that the bag was old, that foetal heart tones had disappeared before birth, and that autopsy showed lungs still unexpanded did not cover fault in technic. Should it be necessary now to inflate an infant's lungs, a reading of the pressure employed may be observed. In an emergency there is a tendency to underestimate the force exerted. The pressure reading is a reminder as well as a source of information. Employing a mercury column and an India rubber breathing bag, I have found that the maximum pressure I can exert is not over 30 mm. of mercury, probably not sufficient to do harm in an adult.

A rebreathing bag may become so distended as to obscure its fluctuation, causing one to wonder if the patient actually is breathing. With a distended bag, provided the pressure is not excessive, the movement of the arrow tells definitely the desired information. This device would appear to be invaluable to an anesthetist obliged to work at a distance from the patient's head. It very quickly displays any alteration or interruption of respiratory rhythm, as well as changes in rate and depth of respiration. Though by no means meant to supplant the occasional placing of the hand on the patient's chest, and other constant observations of respiration, it is proving an interesting aid to me in every anesthesia.

In the completely closed carbon dioxid absorption method where the elimination of leaks is of considerable importance, a means of detecting leakage is offered by the bag-pressure gauge. The bag may be filled to several mm. pressure and the gauge observed for drop or maintenance of that pressure. With a leak-free system, a fall in pressure would occur if the consumption of oxygen were more rapid than the supply, and a rise in pressure would occur if the reverse were true. The latter observations are less practical than the actual evidences of oxygen requirement as seen in the patient.

The usual pressures observed, using a breathing bag near the mask, and the carbon dioxid absorption method, are betwen 0 and 3 mm. of mercury, usually with a fluctuation of 0.25 to 2 mm. An increase to about 5 mm. is frequently used to facilitate deepening anesthesia. It is sometimes observed that slight increase in pressure will tend to overcome a respiratory obstruction. A pressure of about 5 mm. has been found an aid to inspiration with the patient in the prone position.

Inflation pressures have not been required since placing the unit on the machine, nor has there been occasion to anesthetize for thoracic surgery, but further data is expected.

During large gas or oxygen additions the gauge shows an increase in pressure above that in the bag, the arrow ceasing to fluctuate. When the pressure in the bag reaches that registered in the gauge, the respiratory fluctuation is again apparent. By observing the gauge one can avoid reaching dangerous pressure levels and at the same time save gas and annoyance.

CONCLUSION

A practical unit for measuring bag pressure gives information as to pressures used, variation in pressures used, alteration or interruption of respiratory rhythm, changes in depth and rate of

respiration, and presence of leaks.

I am at all times grateful to my teacher, Doctor Ralph M. Waters; I also wish to express my appreciation to Doctor J. A. Heidbrink and Mr. B. J. Clark for the development of the bag-pressure unit.

TUBERCULOSIS and OTHER CHEST CONDITIONS

The Law of Rest

By F. I. DRAKE, M. D.
Milwaukee

A young man 25 years old came into our clinic in a small town in southern Wisconsin and asked for an examination. After going over his chest we were obliged to tell him that he had tuberculosis. Not in the least daunted by this melancholy news, he replied at once, "I know just where I got it. When I was a lad in high school there sat immediately behind me a boy of my own age who was coughing, coughing all the time. In the course of several months the poor fellow died of consumption. I know that is where I caught the disease." This young man was taking into his own lungs the moisture laden with the germs of tuberculosis which was coughed up by his boyhood friend. He was constantly dosed with the powerful tubercle bacillus. It is entirely possible that this is where and when and how he contracted the disease. Contact infection is the oldest known means of spreading tuberculosis. Aristotle suspected it back in the days of Hippocrates, but it remained for Villemain to prove the contagiousness of tuberculosis. In comparatively recent years we have discovered that the disease may be contracted by the ingestion of infected foods, particularly milk.

And now investigators in Cornell University seem to have demonstrated another method by which the disease may be passed on from one individual to another. Summed up in a few words the hypothesis is that the acid fast tubercle bacilli which we see under the microscope are mature forms of non-acid fast granules which, in suitable soil, may grow and develop into tuberculosis germs. If this be true, then some of our present baffling tuberculosis problems may find solution.

Still, the great desideratum for which men have spent their lives and dispensed fortunes, something to cure or prevent tuberculosis, a vaccine or a serum, seems as remote as ever. Many such cures have been offered the public, but like a mirage in the desert they have at first appeared very real, only at last to be very deceptive. In the end we have always returned to first principles and treated our patients along hygienic and sanitary lines.

In this category of remedies rest is paramount. All else is merely accessory. The mechanism of a watch is beautiful but without the main spring it is useless. We have emphasized the necessity of rest so often that it seems almost trite, but any principle so timely, yet so often violated, can never become trite. Our patients must be made to know and accept it as an abiding presence. The moment fatigue appears, that moment have they reached the limit of safety. No set formula for rest can be laid down for the tuberculous to follow. Each is a law unto himself. With whatever degree of intelligence he applies this law to his every action, just to that extent will he make progress toward recovery.

SUMMER CLINICS

The Chicago Medical Society will hold clinics at the Cook County Hospital June 17 to 29 inclusive. Members of the hospital staff will give these clinics on the following schedule:

8 to 10 a. m.—Medical and surgical clinics in amphitheatres.
10 to 12 a. m.—Ward walks.
12 to 1 p. m.—Luncheon.
1 to 3 p. m.—Medical and surgical clinics in amphitheatres.
3 to 5 p. m.—Ward walks.

The amphitheatre work will be devoted to medical and surgical dry clinics and lectures. Two amphitheatres will be used simultaneously, one for medical and one for surgical clinics. Each clinic will be one hour in length, thus giving four medical and four surgical clinics daily. Operative work will be done during the hours devoted to ward walks. The clinical work will be confined largely to general medicine and surgical subjects.

It is planned to hold six meetings to be addressed by speakers other than members of the hospital staff on such subjects as heart disease, tuberculosis, obstetrics, physiotherapy, gastro-intestinal disorders and possibly diabetes.

A registration fee of ten dollars will be charged to cover the cost of preparing for and conducting the clinics.

For further information apply to the Chicago Medical Society, 185 N. Wabash Ave., Summer Clinics Committee.

THE WISCONSIN MEDICAL JOURNAL

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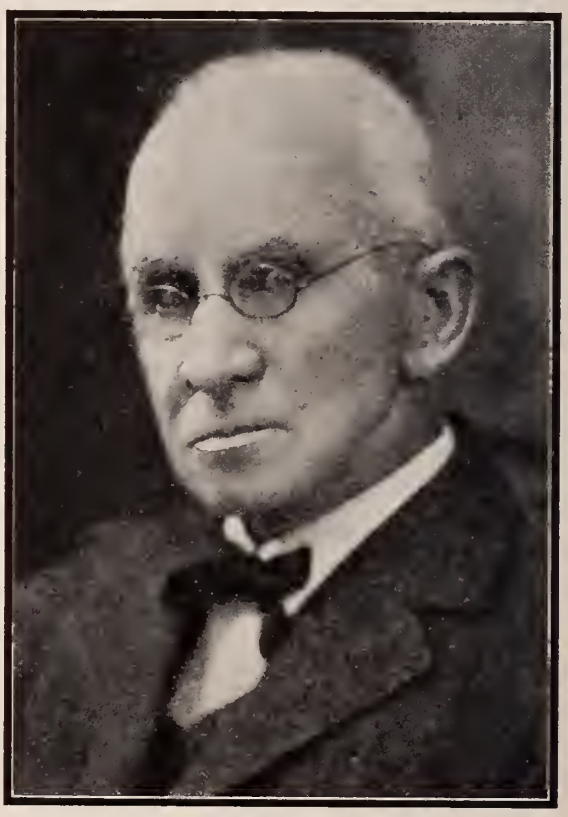
EDITORIALS

CHARLES STUART SHELDON

WHEN a notable career is brought to a close, it is natural to consider the factors in personality which destined that particular career to be outstanding.

The death of Doctor Charles Stuart Sheldon closed a life that was distinguished. To those who knew him best the strong elements in his unusual personality predetermined a success in whatever line of endeavor he chose. Energetic zeal, which characterized any activity to which he gave his interest; buoyant optimism, which gave him joy in his work and recreations; quick and sympathetic response to the wholesome fun in the lighter side of life, which made for a keen sense of humor and a genial social charm; absolute loyalty to those interests in life which followed his creed and his beliefs—these were the elements which influenced Doctor Sheldon's relations to those close about him, to the community in which he lived, and to the profession which he loved and which loved him.

It was this personality that naturally developed a home life as ideal as it was inspiring to those who knew it intimately; that gave and held for him the friendship not only of his neighbors but of a circle that extended beyond the commonwealth; that led him to serve his community from the day he entered it in young manhood, through arduous years so long as strength was given him; that kept active his interest in all things he deemed to be worthwhile—such as his devotion to his Alma Mater, Yale, from the time he was a conspicuous undergraduate, organizing the first glee club of his college, through the years when he was the senior Yale alumnus in Wisconsin.



Dr. Charles Stuart Sheldon,
January 14, 1842—April 20, 1929

These attributes expressed themselves distinctly in his professional life:—zeal, energy, optimism, quick sympathy, loyalty. Doctor Sheldon will not be remembered because of a great discovery through research, nor by a shelf of books bearing

his name, nor by an intricate operation he devised. His patients will cherish his memory because of his untiring, unselfish, skilful care. The members of the profession will think of him as a fine type of the doctor who practices his art ethically and ably; and they will ever acclaim the distinguished service he rendered medicine in the development and furtherance of the organization of the profession in his state. As secretary of the Medical Society of the State of Wisconsin from 1892 to 1913, and as its president in 1913-1914, he gave freely of his time, his resources, and his ability until the organization was recognized as one of the most efficient in the country.

Not the least of his attributes as an organizer was his capacity for remembering, recognizing and understanding hundreds of physicians throughout the State. Probably no doctor has even been called by his first name by as many confreres as has "Charley" Sheldon; and yet this familiarity bred no suggestion of anything but marked affection and esteem.

When the medical historian of the far future delves into the archives of the State Medical Society of Wisconsin and reads of the leader of the "Saw Bones Choir;" of the painstaking, matriculous duties performed by the secretary; the sagacious address of the president; the tactful, efficient work of the organizer, he will set up as an important keystone to that early structure—Charles Stuart Sheldon. *A. T. H.*

ETHICS

AFTER the smoke of acute journalism has cleared away, one may learn the facts relative to the expulsion of Dr. Louis Schmidt from the Chicago Medical Society, but at this writing the issue seems too involved to justify an opinion as to the merits of the case.

It seems to be a clear cut question of ethics; but the manner in which it was "played up" in the press, serves as demonstration of a ready spirit of antagonism on the part of the laity against the medical profession.

The action of the Chicago Medical Society—regrettable as it may seem to many—has accomplished two things. First and direct, it has forcibly brought to the fore the question of a modernization of the code of ethics and especially of that part relating to advertising. Modification or change in the rules or by-laws of medical societies might clear the atmosphere, prevent hypocrisy and unfairness in the profession, and prove beneficial to our patients, but if such changes are indicated they call for careful study, proper wording and definition and if found to be advisable, should be made by the organization itself, and not by the public or the lay press, many of whom do not appreciate the value to themselves of this code of ethics, that in this day, is often sneered at.

Second, or indirect, result of this action of the Chicago Medical Society concerns the related matter of the "High Cost of Sickness" or health. In the press, this point has been given primary importance.

This question and its proper solution depends entirely upon satisfactory cooperation between the profession and lay organizations such as the schools, universities, hospitals, health and poor departments, the Hurley and Rosenwald and similar foundations, public health institutes, infant welfare societies, visiting nurse associations, and like organizations and institutions.

In order to bring about this desirable cooperation it will be necessary to realize and appreciate that in the profession there seems to be an increasing tendency to consider medical services as a commodity such as fuel, food, clothing, transportation, etc., but the laity do not coincide with this professional view point—due probably to our altruistic attitude in the past and present, which has led to the expectation of such altruism as a necessary, constant and a to be expected accompaniment of medical practice.

It will be conducive to mutual understanding for the laity to realize that, because of various reasons, there is in the medical profession a tendency away from altruism and toward more commercial standards and, in turn, the profession must appreciate that there is a progressive change taking place in the practice of medicine and that the individual practitioner *must* adjust himself to these—at times revolutionary—changes.

This most important and necessary work of bringing *competent* medical services, at *reasonable* rates, to those in need of such services, can be accomplished by proper cooperation between the profession and lay organizations, but one without the other will likely prove inefficient and fail.

It is believed that the recent publicity given to medico-health matters will prove beneficial, and while awaiting statements from the parties concerned, the friends of Dr. Louis Schmidt hope that the difficulty, probably a misunderstanding, may be amicably adjusted.—*F. G. C.*

THE PRESIDENT'S PAGE

K. W. Dagg

SCIENTIFIC EDITOR-IN-CHIEF

If the editor-in-chief of the Journal of the State Medical Society of Wisconsin were to do no more than select the scientific papers that are to be printed in its monthly issues and to write, or to have others write, editorials on medical subjects, the matter might just as well be left as it is now, i. e., in the hands of Secretary Crownhart, and the Editorial board. I am willing to admit that with the average state medical journal in our country such no doubt is the case. However, Wisconsin is well known as a progressive state, and to deserve this name in fact, our editor should do more than that, and the medical profession of Wisconsin will no doubt support him in every way.

By employing, as I have suggested in my previous letter, the services of a paid scientific editor or a scientific secretary, if you wish to call him that, the society at once would take a step towards progression not yet accomplished by other state societies. One might question, is such a distinction worth while and does such an action carry with it the promise of results justifying the additional financial sacrifice?

It is evident that the gain resulting from such a course would have to manifest itself in a way that would convince you that by it more interest is aroused in scientific medicine among the members of the profession of this state, and that closer contact is produced beween the readers and the editor. It is, to my mind, a distinct advantage that in case I disagree with the opinion expressed in a certain editorial, I know the one person to whom I might address myself. To inquire of the present lay managing editor regarding scientific matters is of course preposterous, and realizing that I would probably let the matter rest at that, the effort to exchange opinions would not be made. But it is exceedingly important that this abortion of effort does not occur, that the contact between reader and editor does take place and bear fruit resulting in a stimulus to reader and editor alike. I doubt very much if outside of Milwaukee there are many physicians that know who are the present editors of the Journal. If I were still very much interested I might look up the names of the men, but again I would have to select from three. If the Journal is to be an intellectual stimulus, easy contact of minds must be made and encouraged between the readers and the editorial office. The editorial aloofness of the present system is chilling, however charming the gentlemen may be personally.

The scientific editor should realize that to keep alive professional ambition and to further this state of continued growth of clinical and scientific medicine through the Journal, is a part of his editorial duty. It is not merely a matter of read it or leave it alone. It's a poor cook whose food is only looked at. The scientific editor must personally know the idealistic and progressive men of the state, those with a deep interest in this or that phase of medicine or surgery. He must enlist them in his service to help raise the general standard of medicine in the state.

Is there any kind of common scientific interest or bond that unites the prominent medical men of this state for any purpose in medicine whatsoever? The men of the various cities of Wisconsin work singly and independently and do good work, but none knows of the other. A scientific editor could change this. Many of our progressive men make it a habit to go outside the state for further knowledge and inspiration. The handy proximity of Rochester has much to do with that. Much of what they are looking for can be had easily and with very little effort at that font of knowledge Alas, the days when Wisconsin, especially Milwaukee, was a mecca for medical men and surgeons has faded with the passing of Nicholas Senn. Can such days be recalled?

The scientific editor might see that the older but valuable men of the profession, the men above sixty, do not take a back seat at too early a time. With many years of clinical knowledge and experience, and of practical wisdom, though possessed of but little laboratory agility, their value and inspiration should not be lost too early.

Those and many others, as I conceive them, are some of the possibilities of service and duties of a scientific editor-in-chief of the Journal of the State Medical Society of Wisconsin.

Do I hear the doubtful ones ask, Is there such a one and can he accomplish it? A good one can.

The State Medical Society of Wisconsin

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SOCIETY PROCEEDINGS

BROWN-KEWAUNEE

One of the largest meetings of the year was held by the Brown-Kewaunee County Medical Society on March 26th at the Beaumont Hotel, Green Bay, when Dr. R. W. McNealy, Chicago, presented a paper on "Complications and Management of Fractures of the Pelvis." About forty-five physicians were in attendance, including several from Marinette, Kewaunee and Algoma.

Dr. McNealy presented his subject in a very interesting and practical fashion, illustrating it with a series of lantern slides taken from thirty-three cases of pelvic fractures. The speaker is attending surgeon at Northwestern university, and also at the Cook County hospital.

Through adoption of a resolution, the medical society pledged its cooperation to those who are working for the preservation and restoration of the old Fort Howard hospital where Dr. William Beaumont was once post surgeon.

At a meeting of the society on April 23rd, Dr. Francis D. Murphy, Milwaukee, associate professor of medicine at Marquette University, spoke on "Chronic Nephritis with Lipoid Changes in the Kidney and other Organs."

Plans are being made for entertaining a joint meeting of the sixth and eighth districts of the State Society at Green Bay the first week in June. Speakers of national prominence will take part. *M. H. F.*

EAU CLAIRE AND ASSOCIATED

The Eau Claire and Associated Counties Medical Society met on March 25th at the Hotel Eau Claire. Following a six-thirty dinner Dr. Albert R. Tormey, Madison, discussed "The Diagnosis and Treatment of Infections of the Hand." This talk was illustrated with motion pictures. "Some Phases of Heart Disease" was the subject of an address by Dr. C. M. Kurtz, Madison. Dr. Tormey's paper was discussed by Drs. H. F. Derge and A. F. Haag and Dr. Kurtz's by Drs. E. L. Mason and R. F. Werner. *E. E. T.*

FOND DU LAC

At a meeting of the Fond du Lac County Medical Society held on April 10th Dr. John W. Powers, Milwaukee, addressed the physicians on "Fractures of the Leg." The talk followed a dinner at the Retlaw Hotel. *H. R. S.*

GREEN LAKE—WAUSHARA—ADAMS

Dr. C. U. Senn, Ripon, was elected president of the Green Lake-Waushara-Adams County Medical Society at a meeting held on Tuesday evening, April 2nd. Dr. B. E. Scott, Berlin, was chosen vice president and Dr. A. J. Wiesender, Berlin, secretary-treasurer.

At the meeting there was informal discussion as to the advisability of more regularity in the holding of meetings and it was voted by the membership to convene monthly hereafter, with a program at each session. The society will meet next at Berlin on Friday evening, May 3rd. *A. J. W.*

KENOSHA

The March meeting of the Kenosha County Medical Society was held at the U. S. National Bank Building. Dr. Edmund Mensing, Milwaukee, gave an interesting talk, illustrated by lantern slides, on "Infections of the Hand."

Using the resolutions of the Brown-Kewaunee County Medical Society as a working basis, plans were submitted by the officers as a solution for local problems. It was suggested that a central bureau, operated by the county medical society, with full time secretary and a corps of paid physicians, be established; that there be a file, with the cooperation of the Chamber of Commerce, of temporarily indigent people who were to pay the physician his fee whenever possible, such fee to be regulated according to the patient's means. This plan, it was thought, would eliminate the vast amount of free medical service rendered at the present time. A committee of three physicians was appointed to investigate and prepare a more detailed report.

The April meeting of the society was held on Friday, April 26th. The program consisted of the following: "Anatomy in Relation to Fractures," by Dr. D. W. Crile, Augustana Hospital, Chicago, and "X-Ray Diagnosis in Early Pregnancy," by Dr. D. S. Beilin, Augustana Hospital, Chicago. A business session and discussion followed. *M. P.*

LA CROSSE

A joint meeting of the La Crosse County Medical and Dental Societies was held at Pioneer Hall the evening of March 19th. The meeting was preceded by a dinner during which the doctors were entertained by an orchestra, singing and a saxophone solo by Dr. Spika of the dental society.

Dr. James D. Kelly, La Crosse dentist, gave an interesting paper on "Focal Infection, and Its Relation to Medicine." Dr. Phillips F. Greene, associate professor of surgery of the University of Wisconsin, spoke on "Chinese Medicine." *J. E. H.*

LANGLADE

The Langlade County Medical Society held its regular meeting at the Butterfield Hotel, Antigo, on Wednesday, April 3rd. A business meeting followed the twelve-thirty luncheon at which a resolution was passed that no contract work would be accepted by any physician in the county, and if a physician did accept such contract work, he would not be eligible as a member in the Langlade County Medical Society.

After the business session Dr. Richard B. Stout, of the Jackson Clinic, Madison, was introduced and gave an illustrated lecture on "Spinal Anesthesia." Dr. Arnold Jackson, also of the clinic, spoke on "Various Forms of Goiter." *J. C. W.*

MARATHON

"Free Clinics" was the matter under discussion at a meeting of the Marathon County Medical Society at the Wausau Memorial Hospital on Thursday, April 4th. The following officers were recently elected and appointed

for the year 1929: President, Dr. W. A. Green; vice president, Dr. A. W. Boslough; secretary-treasurer, Dr. V. E. Eastman; delegate, Dr. H. H. Christensen; alternate, Dr. S. M. B. Smith; board of censors, Drs. J. N. Doyle, R. M. Frawley and W. E. Zilisch. Members appointed on the various committees include: Dispensary Committee, Drs. J. M. Freeman, W. C. Frenzel and R. F. Braun; Legislative Committee, Drs. J. F. Smith, D. T. Jones and J. N. Doyle; Program Committee, Drs. S. M. B. Smith, F. H. Frey and G. H. Stevens; Health Committee, Drs. J. M. Freeman, R. F. Fisher and H. T. Schlegel. *V. E. E.*

MARINETTE-FLORENCE

The Marinette-Florence County Medical Society held its monthly meeting on March 29th. Dinner was served at six o'clock and was followed by a symposium of post influenzal complications. Dr. J. V. May, Marinette, spoke on "The Ear and Sinuses," Dr. H. F. Schroeder, Marinette, on "The Chest," and Dr. J. W. Boren, Marinette, on "Renal Disturbances." This proved one of our most interesting meetings, there being a good discussion, bringing out many viewpoints of this prevalent ailment.

M. D. B.

OUTAGAMIE

Dr. Frederick H. Falls, professor of obstetrics at the University of Illinois Medical School, Chicago, addressed about fifty members and guests of the Outagamie County Medical Society at the Conway Hotel, Appleton, Thursday evening, April 4th. His subject was "Eclampsia" and he stressed particularly the importance of prenatal care. Physicians from Oshkosh, Neenah, Menasha and Appleton were present. *C. D. N.*

PORTAGE

The Portage County Medical Society held a meeting on March 13th at the Hotel Whiting, Stevens Point. Dinner was served at six-thirty to sixteen members, including the president of the State Society, Dr. Karl W. Doege, who gave a very interesting illustrated talk on "Tumors of the Mediastinum." Dr. H. M. Coon spoke on "Tuberculous Pleurisy." *F. R. K.*

RACINE

The regular meeting of the Racine County Medical Society for March 28th was held at Little Bohemia, Racine, at eight o'clock. A banquet was served after which Dr. J. E. Gonce of Madison, gave a splendid talk on the subject of "Infantile Convulsions."

The members met again on April 26th at Sunny Rest Sanatorium. *S. J.*

ROCK

Approximately seventy physicians practicing in Rock county and invited guests, attended the regular meeting of the Rock County Medical Society, which was held in the Grand Hotel, Janesville, on Tuesday evening, March 26th. A six-thirty dinner was served and was followed by a business session and program.

Dr. Paul Magnuson, Chicago, and Dr. Donald Balfour, Mayo Clinic, addressed the physicians, both lectures being illustrated by lantern slides. Dr. Magnuson spoke on "The Prevention and Correction of Deformities in Fractures in the Region of the Joints," and Dr. Balfour presented a paper on "Diagnosis and Treatment of Lesions in the Upper Abdomen."

A committee was appointed to make a survey to determine the extent of the state's encroachment on the practice of physicians in Rock and other counties. The committee comprises: Drs. Wayne Munn, Janesville; G. K. Wooll, Janesville, and George Belding, Orfordville. *H. E. K.*

WALWORTH

The monthly meeting of the Walworth County Medical Society was held on April 9th. Dr. H. C. Schumm, Milwaukee, addressed the society on "The Cause and Treatment of Foot Aches." *S. G. M.*

WAUKESHA

Dr. A. J. Loughnan, Oconomowoc, was selected president of the Waukesha County Medical Society at a recent meeting. Dr. W. B. Campbell, Waukesha, was chosen vice president; Dr. J. F. Wilkinson, Oconomowoc, secretary-treasurer; Dr. M. R. Wilkinson, Oconomowoc, delegate; Dr. H. T. Barnes, Delafield, alternate, and Drs. J. B. Noble, Waukesha; W. E. Nicely, Waukesha, H. T. Barnes, Delafield, as censors. *J. F. W.*

MILWAUKEE ACADEMY

Dr. Walter Alvarez, of the Mayo Clinic, was the speaker of the evening at a meeting of the Milwaukee Academy of Medicine held on March 26th. His paper "Why Food Goes Down the Bowel" was illustrated with pictures and lantern slides. Following his presentation, the Harvey film was shown.

The academy met again on April 9th when Dr. Carl Henry Davis, Milwaukee, spoke on "The Obstetrical Patient." His talk was illustrated with the following films: Prenatal Care, Normal Labor, Forceps, Piper Technic of Version and Breech Extraction, and Cervical Type of Cesarean Section. *D. E. W. W.*

MILWAUKEE OTO-OPHTHALMIC

At the March meeting of the Oto-Ophthalmic Society, held on Tuesday evening, March 19th, at the Wisconsin Club, Dr. Alfred Lewy, Chicago, spoke on "Drainage of the Cysterna Pontis Lateralis." The discussion was opened by Dr. W. E. Grove, Milwaukee.

The society met again on April 16th when Dr. H. F. Wolters and Dr. Edwin Bach presented case reports. Dr. Wolters presented a paper on "Cavernous Sinus Thrombosis with Recovery" and Dr. Bach on "Acute Mastoiditis, Complicated by Air Embolism and Sinus Thrombosis with Recovery." *E. R. R.*

MILWAUKEE PEDIATRIC

The Milwaukee Pediatric Society met at the Milwaukee Children's Hospital at eight o'clock Wednesday evening, March 13th, and were addressed by Dr. Isaac Abt on "The Protein Factor in Infant Metabolism." *F. R. J.*

MILWAUKEE ROENTGEN RAY

Members of the Milwaukee Roentgen Ray Society and guests met at the Sacred Heart Sanitarium on April 6th. At six o'clock a complimentary dinner was served by the sanitarium sisters to the physicians in attendance. The program follows: Case reports: "Spinal Tumor," Dr. S. S. Stack, Jr.; "Stomach Ulcer, X-Ray Evidence of

Cure After Medical Management," Dr. J. C. Metz; and "Multiple Myeloma," Dr. F. W. Mackoy. The subject "Newer Knowledge of Pyogenic Infections of Bone," was presented by Dr. D. B. Phemister, professor of surgery, University of Chicago, and Dr. Fred J. Hodges, Madison, spoke on "Roentgen Signs of Circulatory Diseases."

WISCONSIN UROLOGICAL SOCIETY

The Wisconsin Urological Society held an interesting and instructive meeting on April 12th at the Milwaukee County Hospital. The morning program consisted of the following papers: Dr. E. L. Miloslavich, Milwaukee, on "Leukoplakia of the Renal Pelvis;" Dr. R. E. Stockinger, Milwaukee, on "Granuloma Inguinale;" Dr. W. J. Carson, Milwaukee, on "Ureteral Calculus with Pyonephrosis, Two Stage Nephrectomy;" Dr. W. M. Kearns, Milwaukee, on "Putty Kidney, Nephrectomy, Dilatation of the Contracted Bladder in the Presence of Ureteral Regurgitation."

Luncheon was served at the hospital at twelve-thirty and the program continued: "Report of an Unusual Case," by Dr. J. B. Wear, Madison; "Intradural Caudal Anesthesia for Cystoscopic and Intraurethral Manipulations," by Dr. G. H. Ewell, Madison; "Hematuria and Its Significance," by Dr. H. M. Stang, Eau Claire; "The Differential Diagnosis Between Biliary and Renal Calculi; by Dr. W. G. Sexton, Marshfield, and Dr. R. F. Potter, Marshfield, "Some Pitfalls in the Diagnosis of Renal Tuberculosis," by Dr. C. W. Eberbach, Milwaukee.

The Urological Society met in joint session with the Medical Society of Milwaukee County for the evening meeting when Dr. Harvey G. Beck, professor of medicine, University of Maryland, Baltimore, addressed the physicians on "The Relation of Urology to Internal Medicine." Dr. J. C. Sargent, Milwaukee, spoke on "The Interpretation of the Seminal Vesiculogram."

Dr. H. M. Stang, Eau Claire, was chosen president of the Wisconsin Urological Society for the ensuing year. Dr. Walter Gray, Milwaukee, was elected vice president and Dr. Walter M. Kearns, Milwaukee, secretary-treasurer. The next meeting will be held in the fall at La Crosse.

GREEN BAY ACADEMY

The Green Bay Academy of Medicine, recognizing the honor due Dr. William Beaumont, army surgeon who performed many feats of skill whereby he saved the lives of a countless number of soldiers at the old Fort Howard infirmary, introduced a resolution at its last meeting commending the move to save the old army hospital building and expressing its appreciation to Mrs. Mary Woolford Hein, the owner, for donating it to posterity. The resolution said further that a committee representing the physicians and surgeons of the Academy of Medicine be appointed to work with other committees in the interest of the move to restore the landmark.

UNIVERSITY OF WISCONSIN

The second address under the William Snow Miller Lectureship, established in 1928 by the Phi Beta Pi, was held on April 1st, at the Service Memorial Institute, Madison. Dr. F. R. Packard, librarian, College of Physicians of Philadelphia, addressed the gathering on "Ambrose Pare."

On April 15th, the Phi Sigma Society invited the University Medical Society to meet with them in the auditorium of the Biology Building. "The Rise and Progress of Medical Entomology," was the subject of a paper presented by Dr. L. O. Howard, entomologist, U. S. Department of Agriculture. *H. W. C.*

NEWS ITEMS AND PERSONALS

Dr. C. A. Harper, health officer for the state of Wisconsin, completed twenty-five years of service on Monday, April 1st. The doctor is the oldest health officer in the United States in point of service and was appointed to the Wisconsin department by Gov. Robert M. LaFollette in 1904. At the time of his appointment, the entire state staff consisted of himself and one stenographer. There are now eighteen bureaus and departments, covering education, inspection, experimentation, statistics and prevention.

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An interesting travel talk by Dr. A. J. Pullen, Fond du Lac, was delivered before the Parent-Teacher Association of North Fond du Lac recently. Dr. Pullen was formerly a resident of the village.

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Dr. Arnold Jackson, of the Jackson Clinic, Madison, attended the annual meeting of the American Society of the Study of Goiter at Dayton, Ohio, during March.

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Nurses in public health work in Wisconsin convened at Madison on March 19th for their ninth annual conference on maternity, child welfare, and public health nursing. Dr. W. J. Miller, deputy state health officer, George Crownhart, secretary of the State Medical Society, and Dr. J. H. Mortell, Oshkosh dentist, addressed the nurses at a symposium. "The Public Health Nurse As Others See Her" was the subject under discussion.

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The Munn-Farnsworth Clinic has announced two additions to its staff of Dr. G. Stanley Metcalf and Dr. Carl N. Neupert. Dr. Metcalf will give special attention to obstretrics and Dr. Neupert to pediatrics.

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Dr. August Sauthoff and his wife, Dr. Mary Sauthoff, of Mendota, sailed from New York on April 11th, on the "Muelchen" for Europe.

They will spend six months studying and traveling abroad and will make a special study of nervous diseases at the University of Hamburg and the University of Vienna. At present both Dr. August and Dr. Mary Sauthoff are physicians at the Mendota State Hospital.

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Dr. George H. Conklin, Superior, who underwent a major operation the latter part of March, is now well on the road to recovery.

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A campaign against persons who expectorate on sidewalks, in street cars, theaters and other public places, was opened by the Milwaukee health department recently on orders from Dr. John P. Koehler, health commissioner. Sanitary police in plain clothes were sent out

with instructions to arrest persons violating the anti-spitting ordinance. Offenders will be arraigned in district court.

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When the public learns that pneumonia is an infectious disease, a lesser toll of citizens will be claimed, according to the State Board of Health in its biennial report. The board urges a better control of the respiratory disease through strict isolation and a modified quarantine.

Pneumonia which claimed 67.7 persons in 100,000 of population, now is exceeded in mortality in Wisconsin only by heart disease, cancer, cerebral hemorrhage and Bright's disease.

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Dr. C. J. Moran, who for the past six months has practiced at Galesville, left recently with Mrs. Moran for West Salem, where he has become associated with Dr. Guy Wakefield. Dr. Moran plans to spend a year at West Salem and at the close of that period, will take up post graduate work.

Dr. R. L. Alvarez, Galesville physician whose place was filled by Dr. Moran, returned the latter part of March from a trip around the world. Starting from Galesville, Dr. Alvarez traveled east, visited European and Asiatic cities, and reached home by way of the Pacific.

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Dr. T. J. Redelings, Marinette, was the principal speaker before the Menominee Woman's Club upon the occasion of the Public Health Day program. His theme was "Heredity."

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The rich and the very poor get the best medical care today; the rich because they can afford it, the very poor because government and philanthropy have made provision for them. Those who are neither rich or poor now find it hardest to get the best possible medical service. Dr. Joseph Lambert, Antigo, speaking to the Lions' club recently, in addition to bringing out this situation, told of what is being done by men engaged in research and framing remedial measures to correct its evils and reduce the cost of sickness.

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Dr. Walter A. Ford, a member of the staff of the Sheboygan clinic, returned in March from New Orleans where he attended a post graduate course at the Medical School of Tulane University.

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Dr. T. L. Harrington, of the medical staff of the Wisconsin Anti-Tuberculosis Association, discussed "The Relation Between Sound Teeth and Good Health" before a meeting of the Woman's club of the University settlement, Milwaukee, recently.

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Dr. C. G. Dwight, of the Dwight and Schubert clinic, Madison, returned on March 29th from Glendale, Calif., where he has been making his home for the winter. He will resume his practice at once in the treatment of diseases of the eye, ear, nose and throat.

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So eager is the village of Arpin to get a physician that it has offered a guarantee of $1,000 worth of business the first year, to be paid whether anyone is sick or not. This situation came about through actions taken by the Arpin Advancement Association.

According to the plan to support a doctor, 100 families will pledge $10 a year towards a fund and if the signer requires the physician's services the amount will be credited to his account.

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Dr. J. Clyde Smith, Beloit, attended during April a special clinic held at Kansas City.

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Dr. Charles H. Beadles, Beloit, who has practiced in that city for the past six years, left about the middle of April to take over the medical work of the Nash Motor Company hospital at Racine. Dr. Beadles is a graduate of Creighton University School of Medicine in 1915.

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Dr. D. J. Ryan, Neenah, addressed the Rotary Club at a recent noon luncheon on "Dangerous Infection of Rabbits and Other Game." The day previous he spoke to the Menasha Rotarians on the same subject.

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Wisconsin statistics do not bear out assertions that cancer is developing earlier in life than formerly, Dr. C. A. Harper, state health officer told public health nurses recently. Dr. Harper cited as an encouraging sign the fact that the cancer age in 1928 was the same as in 1905.

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Dr. J. P. Zohlen, a member of the staff of the Sheboygan clinic, gave an interesting address before a large audience at the Jefferson school, Sheboygan, recently. Dr. Zohlen spoke mainly from the standpoint of preventive medicine, touching upon the more common communicable diseases and portraying the means at hand to prevent the spread and infection of the various preventable diseases.

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Dr. W. G. Riopelle, Beaver Dam, has opened offices in a new two-story brick building at 141½ Front street.

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Dr. F. F. Bowman, city health officer, discussed "Keeping Madison Healthy," before the Madison Real Estate board at a recent noon meeting at the Loraine Hotel.

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Dr. O. J. Wolfgram of Lyons, who is associated with Dr. F. F. Newell in the National Bank building, Burlington, sustained a fractured right arm and other injuries in an auto collision Easter Sunday at Sarasota, Fla., where he has spent the past winter to regain his health.

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Tularemia, rabbit disease, and contagious abortion was the subject of an address by Dr. W. D. Stovall, director of the state hygiene laboratory, before the American Businessmen's club luncheon, Madison, on April 1st.

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Marked increase in deaths from cerebral hemorrhage is noted in the quarterly bulletin of the State Board of Health. The deaths have increased steadily each year in Wisconsin as is shown by the fact that the rate per 100,000 in 1908 was 50.6, while in 1927 it had increased to 88.4.

"Cerebral hemorrhage is now responsible for more deaths in Wisconsin than any other cause except heart disease and cancer," says the board. "It is the result of arterial disease and may very properly be considered as a cause of death for people who are aged."

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Twenty-three physicians attended the monthly meeting of Mercy Hospital staff, Janesville, on April 4th. Following a six-thirty dinner Drs. H. E. Kasten, Thomas Flarity and C. H. Dodge represented a number of interesting case reports.

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Dr. and Mrs. Frederick A. Davis, Madison, returned about the first of April from a six weeks' cruise through the West Indies. They visited the principal islands and also at Caracas, Venezuela.

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Dr. Edward Blumer has again been re-elected as village president of Monticello. He is now serving his nineteenth year in that capacity.

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A study of the cost of medical care is now being conducted in Milwaukee county by Dr. H. W. Powers and a special committee of the Milwaukee County Society on this subject. According to a recent press report, Dr. Powers said his committee is still studying the charity clinic question and will not make a report for some time. The middle class is the heart of the problem. This group of society neither is being benefitted by free clinics nor is able to buy the best that medicine has to offer.

"There has been a great advance in medical science in the last twenty-five years," explained Dr. Powers. "The x-ray has come, there is improved knowledge of blood conditions and of internal diseases such as diabetes. There is considerable use of scientific apparatus and of specialists and that kind of service is very expensive.

"The very poor person can get all this service and the very best of it gratis, at the county hospital. The rich can afford to pay for it.

"But the middle class doesn't want to accept charity and a thorough examination is costly. The time has gone when the general practitioner can give the utmost in diagnosis or treatment.

"We are against the state giving these services free. If the state goes into the practice of medicine, doctors will suffer. Yet it is a problem and we do not know how to provide these expensive services any cheaper."

Dr. E. L. Tharinger, secretary of the Milwaukee County Society, explained that the problem is by no means simple and is like getting at the high price of all other commodities. It is difficult to see how it could be solved by reducing medical fees alone.

"From the medical man's point of view, comparing his income with that of other vocations, considering the cost of his education and the fact that it is seven years after he leaves high school before he even starts to practice, it is very difficult to lower fees," he said. "The doctor pays more for a plumber to come to his home than he gets for one of his own calls."

A national committee is now investigating the problem.

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Four Milwaukee physicians were awarded fellowships in the American College of Physicians for their contributions in clinical medicine, it was announced at Boston on April 9th where 1,500 doctors from the United States and Canada were convening. They are: Drs. Andrew I. Rosenberger, Norbert Enzer, Joseph Lettenberger and Francis D. Murphy.

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Dr. Paul L. Eisele, Milwaukee, has purchased the practice of the late Dr. J. S. Foat, at Ripon.

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The attorney general has rendered an opinion to the secretary of the State Board of Medical Examiners that testimony can be received in Wisconsin courts of medical experts of this state as expert witnesses, even though they may not be licensed physicians in Wisconsin.

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For the treatment of body disabilities and the physical re-education of handicapped children a small corrective gymnasium has been added to the equipment of the department of radiology and physical therapy in the new Memorial Institute unit of the University of Wisconsin.

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Dr. W. G. Sexton, Marshfield, addressed a gathering of men and young men recently in that city on "Relation of Father to Son."

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Since the State Laboratory of Hygiene began the agglutination test for undulant fever upon specimens of blood sent to the laboratory the State Board of Health has received reports of a number of cases. The board proposes to get a case history on all these cases to determine the varying symptoms which the patients presented.

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Citing the rapid increase of diseases that are incidental to the wear and tear and speed of modern life, Dr. C. A. Harper, chairman of the Wisconsin Board of Health, in an address before the Kiwanis club of Madison recently, urged that all adults have a thorough and conscientious physical examination annually.

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The staff of Theda Clark Hospital, Neenah, held its annual meeting on April 12th when the following officers were elected for the ensuing year: President, Dr. G. N. Pratt; vice president, Dr. A. B. Jensen, and secretary, Dr. G. H. Williamson.

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Dr. S. Plahner, Milwaukee, spoke on "Curative Pedagogics" before the staff of the Prevocational School for Boys, Milwaukee, on Monday, April 8th. On April 15th he held the same lecture before the principal and teachers of the Prevocational School for Girls.

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Dr. Otho A. Fiedler of the Sheboygan Clinic was chosen a fellow of the American College of Physicians at the April meeting of that organization.

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A lecture on military hygiene was given to members of the 32nd division tank company by Dr. H. W. Lawrence, Janesville, recently.

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Formal opening of the new addition to the building of the Pember-Nuzum clinic was held Tuesday night, April 16th, when physicians of Janesville and the sur-

rounding territory were guests of the clinic at a program followed by a luncheon. The public opening of the new building was held the following Thursday evening, when citizens of the city were invited to make an inspection.

At the opening for physicians on Tuesday, a tour of the building was followed by a program in the new library and recreation room. Dr. T. W. Nuzum gave a talk on the development of the practice of medicine.

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Drs. H. A. and J. C. Devine, who have been associated with the Wiley-Smith clinic, Fond du Lac, have now established separate quarters in the Hutter building, where they will engage in the general practice of medicine and surgery.

Each of the doctors has a consultation room and in addition the quarters include an emergency or industrial room for the care of accident cases, a fluoroscopic room, two small rooms for laboratory work and a reception room.

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Appointment as local surgeon for the Northern Pacific railway was received by Dr. C. O. Lindberg, Grantsburg, during April.

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Dr. George F. Goggins, Green Bay, was named as city physician at a recent meeting of the council.

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Dr. E. L. Miloslavich, director of the Research Laboratories at St. Mary's Hospital, Milwaukee, addressed the Kenosha Clinic at Kenosha, on April 8th on "Vagus Disease Complexes."

"Medico-Legal and Criminological Experiences in Wisconsin" was the subject of an address before the Marshfield Clinic, at Marshfield on April 17th.

DEATHS

Dr. George Herbert Lawrence, Stevens Point, died at his home Saturday night, March 16th, following an attack of pneumonia. The birthplace of Dr. Lawrence was at Burlington, Ill., where he was born in 1865. He graduated from the Illinois College of Medicine, Chicago, in 1896 and shortly thereafter established a practice at Galesville. In 1906 Dr. Lawrence decided to take up the study of the eye, ear, nose and throat and went to Europe for a stay of several months at the clinics in Vienna and other medical centers.

The doctor served as captain during the World War and almost immediately after his discharge came to Stevens Point where he has practiced continuously for the past nine years. Two years ago Dr. Lawrence again studied in Vienna, pursuing a post graduate course in his specialty. The deceased was a member of the Portage County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. He is survived by his wife and four children.

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Dr. John Samuel Foat, Ripon, died at his home on March 22nd following an illness of three years' duration. Because of ill health, Dr. Foat was forced to retire a year ago and had been confined to his bed for the past six months.

The deceased was born at Hebron, Wis., September 29, 1872. He graduated from the preparatory course of Ripon college with the class of 1899 and received his medical degree from Rush Medical college at Chicago in 1902. Shortly after his graduation Dr. Foat returned to Ripon where he was associated in practice for seven years with Dr. Bruno Schallern. Dr. Foat served in the Spanish-American war and during the World War was assigned to Evacuation Hospital No. 36 in France.

The doctor was health commissioner for the city of Ripon for eleven years and was a member of the Green Lake-Waushara-Adams County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. His wife and a daughter survive him.

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Dr. George Jamieson, Lone Rock, died on March 31st from a heart attack at the age of 77 years. He had started his car preparatory to making a call just a few minutes before his death. Dr. Jamieson was born at Seaforth, Canada, on June 21, 1851. After graduation from his home school, he attended a teachers' college and for three years was principal of a school at Embro, Canada. He graduated from the Detroit College of Medicine in 1884 and also studied for a year at Rush Medical College, Chicago.

Dr. Jamieson began his practice of medicine at Algoma and in August, 1886, came to Lone Rock, where he has been in active practice for the past forty-three years. He is survived by his wife, two daughters and two sons, Drs. Raymond and George of Racine. The deceased was a member of the Richland County Medical Society, the State Medical Society of Wisconsin, the American Medical Association, and at one time served as president of the Richland County Society. Members of the society attended the funeral in a body.

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Dr. Thomas B. McIndoe, Rhinelander, died Saturday evening, March 23rd, the victim of a sudden heart attack. The deceased was born in Wausau on October 5, 1861. He graduated from the Wausau high school with the class of 1880 and from Rush Medical College, Chicago, in 1883. Dr. McIndoe was the first physician to locate in Rhinelander and established his practice in that city in 1885 after practicing in Wausau for two years.

The doctor was a member of the Oneida-Forest-Vilas County Medical Society, the State Medical Society of Wisconsin and the American Medical Association.

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Dr. Henry Ellis Combacker, Osceola, died on April 2nd after a brief illness with pneumonia. Dr. Combacker was born in the year 1853 and was a graduate of the University of Michigan Medical School in 1879. He was licensed in the state of Wisconsin in 1900.

The deceased was a member of the Barron-Polk-Washburn-Sawyer-Burnett County Medical Society, the State Medical Society of Wisconsin and the American Medical Association.

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Dr. Adolph J. Krahn, Beaver Dam, died at Rochester, Minn., Friday evening, April 5th. Dr. Krahn had been

at the Mayo Clinic for a number of weeks and was seemingly well on the road to recovery when he suffered a collapse. He was born on September 14, 1870, in the town of Herman and graduated from Rush Medical College, Chicago, in the year 1905. For a short time Dr. Krahn practiced at Phillips, later at Germantown, and twenty years ago came to Beaver Dam where he had since been located.

The doctor was a member of the Dodge County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. He is survived by his wife.

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Dr. Charles Stuart Sheldon, Madison, one of the best known physicians in the state of Wisconsin, died at his home on Saturday morning, April 20th. Dr. Sheldon had been in ill health during the past winter and death was attributed to old age.

Dr. Sheldon was born at New York Mills, a suburb of Utica, N. Y., on January 14th, 1842, the son of Mr. and Mrs. Stephen Sheldon, both of old New England stock. He graduated from Phillips academy in June, 1859, and with a majority of his classmates he went to Yale at New Haven, where he took his A. B. in 1863 and his A. M. in 1866. The doctor is credited with having founded the Yale Glee Club and at the time of his death was known as one of Yale's oldest alumni.

In 1865 he started for New York to enter the college of physiicans and surgeons of Columbia University, but stopped at Buffalo where he entered the Buffalo General Hospital as assistant resident physician. He graduated from the Buffalo Medical College in the spring of 1867. Dr. Sheldon remained as resident physician until the fall of the same year when he went to New York and graduated from the College of Physicians and Surgeons the following spring.

When Dr. Sheldon returned west after his graduation, he chose Winona, Minn., as the place to begin the practice of his profession. After practicing there three years he located at Greenville, Mich., where he remained for thirteen years. In March, 1885, he moved to Madison and has resided there ever since. For many years his son, Dr. Walter H. Sheldon, has been associated with him.

Dr. Sheldon had been secretary of the State Medical Society of Wisconsin for twenty-five years and president of the organization during 1913-1914. He has also been president of the American Academy of Medicine and a member of its council, held the offices of president and secretary of the Dane County Medical Society, and served as secretary of the Central Wisconsin Society during its whole life of some twenty-five or thirty years. He was a delegate to the American Medical Association most of the time he held the office of secretary of the State Medical Society of Wisconsin.

Dr. Sheldon was married to Miss Emma Louise Hodge of Buffalo, N. Y., on October 30, 1868, who, with four children survive him. The children are: Sidney Roby Sheldon, Seattle, Wash.; Dr. Walter Hodge Sheldon, Madison; Stuart Harris Sheldon, Portland, Ore., and Mrs. Charles A. Lyman, Madison.

Dr. Arthur Solomon Loevenhart, Madison, head of the University of Wisconsin Medical School Department of Pharmacology, died on Saturday morning, April 20th, at Johns Hopkins Hospital, Baltimore, Md., where he underwent an operation three weeks ago.

Dr. Loevenhart was born in Lexington, Ky., on December 29, 1878, received his B. S. degree from Kentucky State University in 1898 and his M. S. degree the following year. Johns Hopkins Medical School awarded him the doctor of medicine degree in 1903.

The deceased came to the University of Wisconsin in 1908, after holding an associate professorship of pharmacology and physiological chemistry for five years at Johns Hopkins. Along with his instructional and research work in the university, he carried an associate editorship of the Journal of Pharmacology and Experimental Therapeutics, and was called to become chief pharmacologist of the research division of chemical warfare of the U. S. Army during the World War.

Dr. Loevenhart was a member of the Dane County Medical Society, the State Medical Society of Wisconsin, the American Medical Association, the Society of Experimental Biology and Medicine, the American Physiological Society, the American Chemical Society, and a fellow of the A. A. A. S. Surviving him are his wife and a daughter.

SOCIETY RECORDS

Due to oversight the membership list of the society as announced in the Blue Book did not include the name of Dr. A. G. Hough, 1253 Williamson St., Madison. Dr. Hough is a member in good standing of the society.

New Members

Eidam, L. W., State Bank Bldg., La Crosse.
Schacht, R. J., Racine.
Koch, V. W., Janesville.
Hodges, Madeline, St. Mary's Hosp., Madison.
Wear, Jno. B., Wisconsin General Hospital, Madison.
Johnson, A. T., Sauk City.
Rowley, A. G., Middleton.
Casper, S. L., Berlin.
Dvorak, H. J., 322 Oak St., Minneapolis, Minn.
Spelbring, P. G., Eau Claire.
Scullard, Garner, Eau Claire.
Christiansen, James, Waukesha.
Helmes, L. O., 224 Public Service Bldg., Oshkosh.
Wollersheim, P. J., Forest Junction.
O'Brien, E. J., Oshkosh.

Changes in Address

Rogers, J. C., Milwaukee, to Pope Hosp., Louisville, Ky.

Beadles, C. H., Beloit, to Nash Motors, Racine.

Crigler, R. R., South Milwaukee, to 920 Packard Ave., Cudahy.

CORRESPONDENCE

LEGAL ADVICE ON AUTOPSY

April 15, 1929.

Sister M. Josepha, Superior.
Sisters of St. Mary's Hospital,
Superior, Wisconsin.

Dear Madam:

Your letter to Mr. Crownhart, Secretary of the State Medical Society, has been referred to me.

You ask six questions, and I will copy each question and insert after it my answer.

1. If permission of the relatives is secured is it legally necessary to have the permission of the attending physician to have an autopsy?

Answer: No. The proper relative or relatives and not the attending physician have the right to control of the body, except that in my opinion the attending physician may perform an autopsy if that be necessary to certify the cause of death as required by law.

2. Should relatives demand an autopsy for their own consolation and the physician refuse such a procedure, may the autopsy be legally performed in such a case without his permission?

Answer: Yes.

3. How many relatives must grant permission in order that an autopsy may be legally performed?

4. If one relative grants permission for an autopsy and another refuses, may an autopsy be legally performed in this instance?

Answer: This depends upon legal relationships and acutal living conditions. The right to the body vests in one of close relationship, legal or actual. Sometimes, rather rarely, it may vest in one who is not a spouse or a blood relative. Ordinarily, the surviving spouse has a superior right, so that his or her consent alone is all that is necessary.

The entire question has been discussed by the Wisconsin Supreme Court in but one case, Koerber v. Patek, 123 Wis. 453, 469-472. A copy of the court's discussion is appended.

5. If the deceased has no relatives may an autopsy be performed?

Answer: Here again certain actual living conditions may give to a stranger to the blood the same right in the body that a relative would have. In the absence of such actual conditions, if an autopsy is necessary to determine the cause of death, it is my opinion that the attending physician is authorized to perform an autopsy in order that he may make the certificate required by law; or, in case of death without the attendance of a physician, or if the certificate of the attending physician cannot be obtained in time for burial, a physician employed for the purpose by the local registrar. In case autopsy is not necessary to ascertain the cause of death, none have any right over the body except as provided by Chapter 155 of the statutes, which requires the public officer having charge of the corpse required to be buried at public expense to promptly notify relatives and deliver the body to any relative who shall claim it. In case it is not claimed by any relative, the corpse, subject to exceptions of certain contagious diseases, specific request of the deceased, and sudden deaths of strangers, may be delivered to the University of Wisconsin or to Marquette University.

6. If a deceased is a county patient may the autopsy be legally performed without the permission of the relatives?

Answer: The fact that the deceased was a public charge does not take away the right of relatives. Under the statute on corpses, Chapter 155, as it now stands, it probably removes the right of others than relatives (a wife being here included as a relative), unless perhaps the unrelated friend assumes the expenses of burial. This does not mean that any friend of the deceased may acquire rights over the body by assuming its burial but means that if the relationships in life had been such that the friend might have claimed the right to bury, he may have that right even though the deceased at the time of death was a county patient. The Wisconsin court has left this matter so indefinite that it is not safe to say whether or not the failure of the friend to provide for the deceased in his last sickness, so that the deceased was a public charge, would forfeit his right to the body if he chooses to exercise it.

The law and the decisions in Wisconsin do not place beyond dispute the rules that control the rights of friends, relatives and others over the body and to make autopsies. I am personally of the opinion that the statutes requiring the attending physician, or a physician appointed by the local registrar under certain conditions, to certify to the cause of death authorize the proper physician to make an autopsy if an autopsy is necessary to make the required certificate. The Supreme Court, in the Koerber case, 123 Wis. 453, at page 463, refers to such a right in the public superior to the rights of relatives. Quoting:

"We recognize, of course, that public welfare may and does require governmental control in many respects for protection of life and health of the people, and for discovery of crime connected with the death of a person, and to such interests the private right is subservient so far as necessary. Upon this ground rest cases of autopsies upon dead bodies under public authority, and to satisfy police regulations for ascertainment of cause of death."

It is the opinion of some, however, that in the absence of a specific authorization to make an autopsy when necessary, the physician may not, without the consent of the proper relatives, make an autopsy even where he cannot otherwise certify the cause of death. No direct decision has been rendered by the Wisconsin court, and it is advisable that physicians proceed with great caution where the relatives do not consent. Also, as a matter of practice, it is advisable that consent be given in writing and that in cases of doubt as to the person or persons whose consent should be obtained, consent of all be obtained if possible. It is to be borne in mind that the right to the body does not necessarily rest in all relatives of equal degree but that questions of fact as to actual relationship in life enter in, and that one determining these questions of fact in advance for his own guidance does so at his peril if he make a wrong decision.

Yours truly,
Counsel, State Medical Society of Wisconsin.

Koerber v. Patek, 123 Wis. 453.

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"The remaining question is whether the right of custody and burial, and resulting right of action for violation thereof, are in the plaintiff. As a result of the decisions and discussions above cited, it cannot be doubted that in the United States, where no ecclesiastical establishment, as a part of the government, equipped with executive and judicial powers as weapons, assumes to itself all authority and right over the dead body before burial, and over both the body and its place of sepulture afterwards, there exists in some individual both the duty and the right to provide to a human body that disposition which general welfare requires, with such ceremonies as convention, respect, and religion dictate. While in the case of one who died remote from those of closer affinity the mere relationship of contact may suffice to arouse such duty in absence of statutes giving charge to some public officer, in normal conditions of human relationship common consent and custom recognize the right and the duty to rest upon those who bore to the deceased in life the closest personal intimacy of acknowledged and lawful relationship. This because, while a duty, the preparation and consignment to final resting place of all that remains of a departed relative is recognized among all civilized peoples as a privilege to continue so far beyond the limit of life that personal service, tenderness, and respect which normally characterized the pre-existing relations. Fiction it may be, but none the less actual, that the attitude of the widower in conferring upon the body of his departed wife —the parent to that of his child—is personal. The body is not the person, but, perhaps unconsciously, is so viewed and treated for the purpose of these last rites of affection. Our statutes give general recognition to this idea by directing bodies of strangers or convicts to be delivered to their "relatives or friends." Secs. 1437, 4926, Stats. 1898. From this point of view, we think, are justified certain conclusions as to which, among the survivors, bear this duty and enjoy the right, which seem to be supported by the general current of authority. First among these is that the right is not vested in executors and administrators, as seemed to be suggested in some English cases quoted somewhat inconsiderately in this country. The right, such as we have suggested it, is not affected by the fact that the funeral expenses may properly be a charge upon the descendent's estate, and thus ultimately be payable by the executor or administrator. **Samuel v. Estate of Thomas,** 51 Wis. 549, 8 N. W. 361. That, however, is the only relationship which such an official has to the subject. An entirely sufficient practical obstacle to the vesting of either duty or right in such officers in most of the United States, including Wisconsin, is that they have no existence at the time when, according to custom, if not necessity, the duty must be performed. Even an executor does not become such until qualified by a court to act. **In re Somervaill's Will** 104 Wis. 72, 80 N. W. 65. It seems, too, upon reason, and authority as well, that, in all normal and ordinary situations, mere intimacy of friendship should be eliminated, or at least subordinated to relations of kinship, as too intangible and indefinite for the law to lay hold of as a basis for either a legal duty or a legal right, although there are some cases where actual domestic relations had been created and held sufficient basis for the right and duty, as where a child was being reared in the family of those not related by blood or adoption. We have no doubt that, save for very exceptional conditions, the right of burial of a dead body rests primarily with those connected with the deceased, in life, by some ties of legal relationship, and we agree with the great weight of authority that foremost and closest in such relationship stands the surviving spouse. If, as we have indicated, this is but an extension beyond death of pre-existing service and duties, what of those are in so close analogy as the service involved in the consortium between husband and wife—personal attendance, care, and service, shielding from insult, supply of necessities, and the like? Certainly none. Before them, all analogies drawn from property rights, of inheritance in kinsmen by blood fail as reasons of legal precedence in the performance of these final duties to our departed. We cannot doubt that the word "relatives," in the above-cited statute, includes the surviving spouse, though in other statutes it may not. **Cleaver v. Cleaver,** 39 Wis. 96.

"In absence of any surviving spouse, situations become subject to such complications that it probably is not wise, if proper, to attempt to declare general rules beyond the case actually presented. Suffice it to say that the duty and right of the parent toward the body of a minor child dying a member of his household, or of the adult child toward a widowed parent, either a member of the child's family circle, or not a member of any other, seems too clear to warrant discussion. That, however, carries the subject far enough to dispose of the question of whether the plaintiff is the person entitled to bring this action, for the complaint alleges that he is the son of the deceased, obviously adult, and that he is the only person having any interest. On demurrer, this is sufficient to exclude existence of any surviving husband or any other child having equal or greater right or duty to supply proper burial to his mother's remains. If others exist whose rights would suffer invasion by such acts as are charged against defendant, so that they would have action therefor, that fact can be set up by defendant, and the necessity or propriety of their joinder be then considered."

Encouraged by the referendum vote of the people on April 2, favoring a repeal of the Severson dry law, several bills have been offered in the legislature to carry out the mandate of the voters. All of the measures provide for some regulation, but leave the enforcement of the law to the local communities. It may still be several weeks before the legislature will have given the proposals final action.

Tabulations on the recent wet and dry vote officially announced by the secretary of state show there were 350,337 for the repeal of the law and 196,402 against it, a wet majority of 153,935.

* * *

After a fight of more than a quarter of a century the voters have approved the constitutional proposal which will permit the legislature to increase its salary. Since 1882 the salary of members of the legislature has been $500 for the session, with a mileage of ten cents going to and from Madison once during the term. The people have approved the plan to allow members of the legislature to fix the salary.

Now an interesting legal question has arisen. There is a provision in the constitution which prohibits any member of the legislature taking an office, whose salary he has voted to increase. Should the courts hold that this would apply to "legislators" it might be that every member of the present legislature would be disfranchised from being a candidate for re-election. The question is a legal one, which may have to be determined by the courts. Many members of the legislature are unwilling to vote a pay increase unless it is certain that they will not be barred from running again.

* * *

Wisconsin is devoting 2,100 acres of land to cranberry production with the annual crop value of $1,000,000 according to the department of agriculture. Over 860 acres of cranberries are in Wood county. Wisconsin stands third of the states in the union in cranberry culture, being outranked only by Massachusetts and New Jersey, according to an announcement of the agricultural department.

* * *

O. A. Stolen, state humane agent, says that a campaign should be started in Wisconsin to stop the cropping of dog's ears. He said that anyone knowing of a dog whose ears have recently been cropped should report the case to the county or state humane agent for action. Mr. Stolen contends that although a bill to specifically prohibit

the cropping of dog's ears was defeated in the legislature, there are ample laws under which cropping can be punished.

* * *

The Blanchard bill for a $1 license fee from all resident fishermen won a large approval in the senate and the measure is now before the assembly. The bill would raise about $250,000 a year which would go into the conservation fund. Considerable opposition has developed to the measure in some quarters and some believe it may be defeated in the lower house. The Izaak Walton League is pushing the bill.

* * *

Circuit Judge Chester A. Fowler, Fond du Lac, has been appointed supreme court justice to succeed the late Chief Justice Aad J. Vinje. The appointment was made by Governor Kohler. Judge Fowler is 66 years old. He assumed his duties April 29.

* * *

The Reis bill which removes income tax exemptions from those utilities that operate street cars passed the assembly by a large margin but must still undergo senate scrutiny. The bill would add $1,500,000 to the state's income tax revenue.

* * *

By producing 882.8 pounds of milk under strictly supervised official test in a seven day period a pure bred Holstein cow at the Southern Wisconsin Colony and Training School, Union Grove, has broken the Wisconsin State record for all time, all breeds and all ages. During this same period the milk from this cow contained in excess of 39 pounds of butter. The marvelous production of the seven year old cow was not unexpected as this dairy animal last year milked in excess of 27,000 pounds of milk in 365 days and as a four year old milked on official test 121.9 pounds in a single day.

* * *

The proposed increase in the tariff on butter from 12 to 15 cents will have no effect and will neither help the producer nor burden the consumer. This is a statement in the third report on a tariff made by Prof. B. H. Hibbard, Prof. John R. Commons and Prof. Selig Perlman of the university.

* * *

Governor Kohler has issued a proclamation asking all citizens to contribute to the Red Cross fund for the tornado sufferers in Wisconsin and Minnesota. A total of 12 were killed in the tornado in Wisconsin and about eight in Minnesota. The Wisconsin national guard made a rapid survey and aided generally in taking care of the storm sufferers.

* * *

The present legislature will do nothing toward consolidation of state departments at this session. Governor Kohler advocated consolidation in his message but he is favoring a study during the next two years of these problems so that consolidation plans can be offered two years from now. The central point of all consolidation plans was the combining of the market, agriculture and dairy and food departments into a single body. Overwhelming farm opposition to these proposals assures their defeat. The senate by a vote of 18 to 10 killed Senator John C. Schuman's bill to abolish the department of markets.

Efforts will again be made at this session of the legislature to repeal Wisconsin's blue law. Under this law everyone attending a theater or any other kind of recreation on Sunday is subject to a $10 fine although the law is rarely invoked. The move to repeal this law failed at a number of previous sessions.

* * *

Defeat of the White bill in the senate to permit the use of a small quantity of benzoic acid as a preservative in fruit juices, indicates that the Wisconsin food laws will end with little or no change when the present session ends.

* * *

The state forestry problem must be met immediately and squarely or it threatens the welfare of the people of the state, the legislative interim committee that has been studying the problem for the last two years, declared in its report submitted to the legislature. The committee declared that the solution of the problem is protecting all forests from fire and the promotion of tree growth. It details a number of recommendations to carry into effect forest promotion.

* * *

Good tillage and systematic rotation must still, after all, be relied upon to combat the weed menace. The use of chemicals is proving prohibitively expensive and trials to date do not suggest these as the way out.

Claims for certain of these chemicals are being questioned very seriously by field crops specialists who have been experimenting to determine the effect of these eradicators, not only on weeds, but on the land on which they are used.

So far, the majority of chemicals used as herbicides have proved unsuccessful because they are harmful to the soil; because they are poisonous, and because of their relatively high cost.

* * *

The average woman student, if any, at the University of Wisconsin spends $148.80 more per year than the average man, according to a pamphlet entitled "Thar's Gold in Them Hills, Pardner," prepared by the Daily Cardinal, student publication.

The entire student body spends approximately $8,555,531.00 in Madison, according to the Newspaper's compilations. The average expenditure is $902.58. Men students spend $20,000 a day while women students' expenditures total $15,000 daily. Women spend three times as much for clothes as men, but men's amusement expenditures total twice the amount spent by women.

* * *

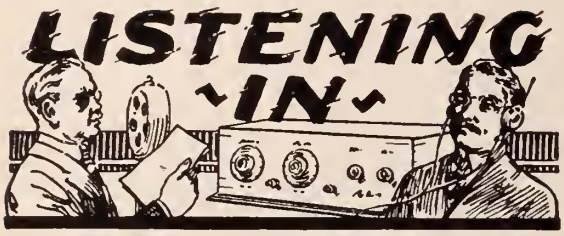
Within the four years, 1924 to 1927 inclusive, 2,767 eye injuries were adjusted under the Workmen's Compensation Act. These eye injuries had resulted in 2 deaths, 6 permanent total disability injuries, 579 permanent partial disability injuries and 2,180 temporary disability injuries.

This casualty list of 2,767 industrial eye injuries totals 2,535 cases of injury to one eye; 147 cases of injury to both eyes; 2 cases of injury to the "second eye" and 83 cases of injury to eyelids.

* * *

Nearly 15 per cent of all boys and girls getting labor

permits in Wisconsin, outside of the city of Milwaukee, were born outside Wisconsin.



"ANOTHER CATCH FOR PHYSICIANS"

Just as this issue goes to press, a member in Watertown forwards the Secretary a long letter, made to appear as personally typed, which winds up by asking that the member write the Pullman company to urge that they use a certain ginger ale. As the member so aptly says "This appeals to me as another catch for physicians, same as that by the —— Tobacco Company in 1927."

Of course he is right and I would suggest that endorsements and testimonials, no matter how secured, may have a very far-reaching effect and neatly encompass the medical profession on the rebound. The very fact that physicians are advertised by this company and that as endorsing their product was brought out in a recent legislative chat when one member said that if physicians would "fall" for such appeals they could not but expect to lose in public confidence.

"If my physician will sign a testimonial for cigarettes because he is sent a few packages free and is asked if he will not be polite enough to sign a card enclosed, I just wonder if he will not try some new medical product on me because it receives a free supply."

Even the Better Business Bureaus report that physicians will pay $10 to $25 a year to get on a "specially prepared" list and maintain that "membership" for years, despite the fact that no income is derived, without investigating at any time.

Senator Oscar Morris, Milwaukee, recently stated to the writer that if Milwaukee physicians would just call the Better Business Bureau of their own Association of Commerce, and members in the state write their state secretary, thousands of dollars annually would be saved the physicians of the state.

"It is rare that there is not time to investigate before investing" said Senator Morris, Secretary of the Milwaukee Better Business Bureau. "Remember that the old stock phrase of 'You have only a few hours to decide' is the basis of all high powered salesmanship and that is the very time when you should delay."

A Madison banker recently bemoaned the fact that even business men made too little use of the services that each bank was prepared to render without charge. He said that not only would the bank secure information about stocks and bonds but that it could obtain information on commercial houses and financial standing generally and would perform a host of other services for its depositor.

And this all leads to the point that your own State Society will help you investigate if the subject matter in any way pertains to physicians or the practice of medicine. And here is how it works,—

A member in Ashland is approached to invest in certain laboratories in the southern part of the state. He writes the state secretary. We call the Board of Health —no information, a suspicious sign in itself in this instance. We call another state department—no information. We call a member in the town where the laboratories are located. He tells us the story. The member had it in twenty-four hours.

This service cannot always be had so quickly, but when you write we will do our best.

"Legislation as a Legislator Sees It"

By HERMAN E. BOLDT, State Senator
Chairman, Joint Committee on Finance
Sheboygan Falls

In the 1925 session Senator Boldt was the senate author of the Wisconsin Basic Science law, which law has remained unaltered on the statute books during the two subsequent sessions. In the present session, the senator is chairman of the joint committee on finance and as such is responsible for the recommendations on every financial measure before the legislature. The senator is well known to our readers and we know that this article by him will be interesting to everyone.—Editor's Note.

No member of the legislature is familiar, through first hand knowledge, with more than half the bills upon which he must act. How he determines his position on those concerning which he has no first hand information is the sole content of this article.

I presume my daily schedule is about that of the average member of the legislature. I am up at 7 or 7:30 in the morning, and then after breakfast secure my mail at the Legislative Post Office in the capitol building, and find in my box from ten to one hundred letters. These I must open and read before the session opens at 10 o'clock for all afternoon I am in a committee hearing, and will probably be there until supper time.

The majority of the letters, and telegrams as well, say in effect, "Please vote against bill number ——S," or "We need your help to defeat such and such a measure," and the only reason they give for their position is that the measure, "is not in the public interest."

SEN. HERMAN E. BOLDT, Sheboygan Falls

These letters are a waste of time on the part of the man who writes them and a waste of my time in reading them. I am no better informed on the measure in question than I was before. I have not been told what the bill does, nor concretely what its effect may be.

Place yourself in the position of a legislator for a moment and answer this question with me—"Just how much influence would that type of letter exert on your mind?"

On the other hand it is my good fortune to receive, from time to time, from someone in my district, a letter calling my attention to a certain bill. The writer states briefly the number of the bill, and the proposed change that it would make in the present status of things. Then he tells me in a paragraph or two, why he does not think that change is a good thing. For example, I have on my desk a letter from a doctor in my district asking me to vote against a bill concerning the practice of chiropody. If he had simply said that he was not in favor of the bill, and hoped that I would vote against it, I would have been just as much in the dark concerning the measure as I was before I received his letter. But he did not say that; he started in by telling me the number of the bill, and asking that I consider it carefully. This physician went on to point out that the measure, if enacted, would authorize a chiropodist to do all surgery on the foot, except amputation, while under the present law a chiropodist is limited to do that which may be done without involving structures under the skin.

Then this friend of mine said that he felt this bill was dangerous because all surgery was susceptible of serious infections, and that it would be particularly true in the case of chiropodists, who must do their work in offices, because they are not admitted to hospitals. Further, he told me that chiropodists had but two years of professional training and compared this to the seven years of education following high school that was required of one who would practice general surgery. The point was made clear in my mind that surgery of the foot was just as important as surgery of the abdomen. And that it was dangerous to authorize such a procedure for the uneducated, lest they fail to recognize conditions that might be merely symptoms of some general disease condition, such as diabetes, and perform an operation where the educated man would appreciate the true situation. My friend concluded by expressing the hope that I would give this my very serious attention.

Now, that is the kind of letter that I, or any other member of the legislature, like to receive. It comes from a man who knows what he is writing about. He has told me briefly what the bill does, and what the results of that action may be. I have been informed about a subject with which I was not acquainted, and with that information I can arrive at my own conclusion; that the measure is not in the public interest.

We like to hear from our friends at home, and when you write to us asking us to either support or oppose a measure, take the time to tell us how you arrived at your own conclusion, and when we have that information, very likely we will arrive at your conclusion too.

Manslaughter Charge Upheld

Dr. F. A. Walters, Stevens Point, who was found guilty of second degree murder by a Portage county circuit court jury because he caused the death of Mrs. Mildred Oswald by an illegal operation, must be sentenced, the Wisconsin supreme court ruled today.

The defense contended that since the woman had been with child only eight or twelve weeks, the fetus, or embryo, had not developed life and for that reason Dr. Walters could not be found guilty under the law.

Many Measures Affecting Physicians Heard as Legislature Progresses; State Permit Fee Repeal Bill Will Probably Pass

As the legislature ends its fourth month, a large number of measures affecting physicians have been heard and other bills approach their final vote.

With bills pending in Senate and Assembly to repeal the state permit for physicians under the state prohibition act, the legislature is withholding final action on both to await the result of the general repeal bill which will include repeal of the permit fees. The general repeal bill has passed the Assembly and it is generally thought that it will pass the Senate. If it should fail of final passage, or be vetoed by the Governor, the separate repeal bills will again be pushed.

Despite passage in the Senate, the State Medical Society is opposing in the Assembly a measure suggested by the circuit judges of the state which would open wider the present bars of privileged communication between physician and patient. The bill was opposed in the Assembly hearing by former senator Harry Sauthoff, Madison, and Secretary Crownhart, both representing the State Society. It was pointed out at this hearing that as long as the testimony of attorneys and priests were barred, so should no further opening be made to permit in court the testimony of the physician respecting information acquired by him from his patients in a professional capacity. It is believed that the Assembly committee will report this measure for killing.

The Assembly has advanced a committee bill which would provide that charity patients at the State Hospital may thereafter be called upon to pay the cost of their care, in event of recovery with subsequent adequate means. This measure was introduced at the instance of Assemblyman Don V. Smith of Jefferson and at the committee hearing was favored by Mr. Smith and Dr. R. C. Buerki of the State Hospital.

The Mulder bill (247-A) to appropriate $5,000 annually to the State Board of Medical Examiners for a two-year period to enable the board to employ a full time investigator to root out quacks in the state was advanced by the Assembly after a favorable committee report by the Committee on Public Welfare. It was heard by the Joint Committee on Finance on April 25th but the recommendation of that committee was not known as this issue went to press. The measure will probably pass if it has the recommendation of the Finance Committee.

SENATOR IRVING P. MEHIGAN, Milwaukee, Author of Senate Permit Fee Repeal Bill.

Two optometry bills were having rough sledding in the Assembly committee during April. Both were aimed to prevent the sale of glasses for correction of vision unless upon prescription by an oculist or optometrist. The measure is supported by the state optometrists association and a like law in New York was held constitutional by the United States Supreme Court during the last week in April.

Dr. A. J. McDowell, assemblyman of Crawford County, has introduced two measures to permit the Society to establish its endowment fund. One measure has passed the Assembly and is now pending in the Senate. No opposition to these bills is anticipated.

The joint move of the Wisconsin Association for the Disabled and the Knights of Pythias to secure a state hospital for crippled children was advanced by the Assembly in April but the bill was then referred to the Joint Committee on Finance where there is a strong possibility that the bill will have an unfavorable reaction from the financial point of view. The bill would appropriate

$500,000 for such a hospital to be established on University grounds. The hearing before the Committee on Public Welfare of the Assembly did not touch upon the financial side, that being left for the Finance Committee.

A move by Sen. Irving Mehigan of Milwaukee to increase the fees to physicians for examination of insane, or alleged insane persons, was defeated in the senate on April 11th. Under the present law the examining physician is allowed $4.00 a day and 10 cents a mile but under the Mehigan proposal the county judge would determine the fee and mileage. The bill was briefly opposed on the floor by Sen. Keppel of La Crosse who claimed that frequently the examinations ran but ten or fifteen minutes. It was further opposed by Sen. Severson of Waupaca County who stated that even though the questionnaires were long, the majority of the questions could be answered by yes and no and sometimes in as short a time as ten minutes. Sen. Severson claimed it was dangerous to open up the statutes to permit county judges to determine whatever fee would be allowed. On the roll call the measure was defeated 17-12.

Those voting for the Mehigan substitute were: Sens. Boldt, Daggett, Duncan, Fellenz, Gettelman, Johnson, Mehigan, Polakowski, Roberts, Roethe, H. H. Smith and White—12.

Those voting against the increase in fees were Sens. Caldwell, Carroll, Cashman, Goodland, Hall, Hunt, Hutchinson, Keppel, Markham, A. M. Miller, Otto Mueller, Rush, Schuman, Severson, Shearer, P. J. Smith and Teasdale—17.

ASSEMBLYMAN J. D. MILLAR, Menomonie, Author of Assembly Permit Fee Repeal Bill.

State Senate Kills Bill to License Chiropodists to Do Surgery, 19-9

After three Committee hearings and extended debate in the Senate on three separate days, the Senate killed, revived and then killed again the Roberts' bill which would have permitted chiropodists to do surgery of the foot except amputations.

When the chiropody bill first reached the senate Wednesday morning, April 10th, its passage was urged by Senator Roberts, of Madison, and Senator P. J. Smith, of Eau Claire. Sen. Roberts introduced the bill at the request of the Wisconsin Association of Chiropodists.

"The only objection to the enactment of this bill is the objection by the physicians to the broader definition of what constitutes chiropody," declared Senator Roberts. "I had the impression that chiropodists were six weeks men and I was surprised to learn that the chiropodists must have a minimum training of six years, four years of this is high school education and two years of 2,600 class hours must be in a full-time chiropody school. No night work is tolerated.

"There are eight accredited schools of chiropody in this country today and it is interesting to note that their faculties are made up for a large part from licensed physicians and surgeons. The proponents of the bill say that under the present law they practice at their peril for while they are allowed to do some surgery, the question has never been decided how far they may go. If the doctor may take care of all of the body in six years of education, it certainly seems logical to me that two years education should be sufficient for a man to learn the ailments of the feet. Note that under the bill they will not be allowed to amputate the foot or toes nor give a general anesthetic. Of course, if the bill is improper I do not want it passed but from my study of the subject I think it is a proper measure."

Charges that physicians were trying to defeat the bill because they were interested in the "almighty dollar" that they might lose if chiropodists

were licensed to do surgery, were made by Sen. P. J. Smith, of Eau Claire.

"I am a member of the committee that heard this measure," said Senator Smith. "I am convinced that these people who appeared for the bill, who have been licensed to do certain work, are doing good work. They showed cases where the doctor had failed and the chiropodists had cured. They are simply asking to help the persons whom the doctor has not been able to cure. I am convinced that agitation to kill this bill is an agitation for the almighty dollar that physicians may or are going to lose if this bill is enacted."

Senator Walter S. Goodland, chairman of the senate committee on education and public welfare, led the fight against the measure. Senator Goodland dissented from the committee report which favored the measure and when the bill came up on the senate floor pointed out that he had been present at all three hearings.

"The definition of the word chiropody in this bill includes mechanical, surgical, or medical treatment of all ailments of the human foot. Now if you will turn to the subjects for their examination you will note that we have the peculiar situation where a bill would give chiropodists the power to do medical or surgical treatment and yet would not require of the chiropodist medical or surgical training. The doctors that appeared at the hearing advised that this bill should be killed in the public interest. I am convinced that to give the chiropodists power to operate on the foot would endanger the lives of many patients. The foot is not a separate organ of the body and many of the symptoms that appear there indicate a major disease such as syphilis, diabetes or some like disease.

"I know that some of the chiropodists that appeared before the hearing were high-class men but the danger lies in giving this power to all chiropodists, good or bad."

Senator C. B. Casperson, of Frederic, thereupon moved the indefinite postponement of the measure. Before the vote could be taken adjournment was had to the Thrusday session. Just prior to adjournment Senator Roberts pointed out that the present bill was modeled on the Illinois law which also became a law in Indiana in 1925, in Iowa in 1923, and in Minnesota in 1927 and declared that this was not a new bill.

When the bill was reached in the senate again on Thursday, Senator Goodland of Racine, renewed the motion for killing of the bill. Without further argument the roll was taken and the bill was defeated 15-13.

SEN. WALTER S. GOODLAND, Racine

GOODLAND OPPOSES BILL

The following day a motion to reconsider the measure was made and following the Easter recess, the bill was reconsidered by a vote of 17 to 10. Following the adoption of a minor amendment, the fight to kill the bill was again resumed. Senator Bruce Johnson, Superior, moved that the bill be killed. Senator Goodland, Racine, again attacked the measure quoted Dean Bardeen of the University of Wisconsin.

"While this bill undertakes to rewrite the entire law relating to the practice of chiropody in this state," said Senator Goodland, "the essential feature is the broad powers of license granted under this proposed law. The proposed substitution of the word 'ailments' for the enumerated foot conditions that chiropodists may treat under the present law, enters the whole realm of foot *diseases* many of which are but the manifestations of serious diseases involving the whole body. Combined with this is the permission to the chiropodists to do all surgery amputations. This would empower

men of but two years professional education to treat the crippled child, possibly the most delicate and exact surgery known today. Even the physician with seven years of professional training sends such cases to the specialist who has years of training and experience.

"A state license is far more than a permit; it is essentially an endorsement. The foot is not something apart but an integral organ of the whole body. In general diseases of the body such as diabetes, hardening of the arteries, and social diseases, the first evidence of the disease may appear in the foot. In the hands of the incompetent this may be treated locally for months unrecognized while the real disease continues to undermine the body structure until it is too late too secure recovery or recovery is prolonged for months and years. In diabetes, for instance, the disease frequently is found first as a low grade infection around a corn. Should we empower chiropodists to treat that infection it might well go unrecognized as to true cause for months while the patient loses the time so vital to recovery.

"Dean C. R. Bardeen of our University, after a study of this bill, declared, "In considering a bill of this kind, one must keep in mind not the good sense of the few best men, but the abuses to which it might be put by incompetence and ignorance.' The course of training now required for the practice of chiropody is not sufficient to give the broad medical background necessary for the practice of safe orthopedic surgery nor does it give sufficient experience in general medical training to make the young graduate realize the dangers that lie in trying to correct conditions which he is not qualified to diagnose or treat.

"I do not question the high motives behind those who sponser this bill. But, I believe that public safety is better guarded by the present statutes and that the new bill is dangerous to the public welfare in the encouragement which it may offer to the inexperienced to attempt work for which they have not been adequately trained.

"Finally, I would remind you that only in the greatest emergencies do physicians do surgery of any consequence in their offices. Are we now to permit chiropodists to do all surgery except amputations in their offices where dangers of infections followed by gangrene are ever present?

"Once this proposed license is granted the public will look upon these men as a fully equipped physician specializing in foot ailments of all types. There will be no recourse for the man who thinks he has grasped for a plank and finds, too late, but a straw."

"BEST NONE TOO GOOD"—CASHMAN

Senator John Cashman of Denmark joined the fight against the measure declaring that when a person is sick "the best is none too good" and that once the chiropodist is clothed with authority to do surgery, the injured patient would have no recourse in law.

"You had best let well enough alone," said Senator Cashman, "and not give them the chance to say that the legislature gave us this authority. Their training is largely by lecture and one cannot become a surgeon by lecture."

Senators C. B. Casperson, Frederic, and W. H. Markham, Horicon, declared that the measure would set the state back to the practice of eighty years ago and Senator Casperson stressed the point that a law agreeable to all had been passed four years ago and that if the Senate were now to set the precedent of permitting one group to add a new field, every group would be again demanding added privileges.

The bill was defended by Senators Roberts, Madison; Hunt, River Falls; Polakowski, Milwaukee and Smith of Eau Claire. The roll call showed the final defeat of the bill by a two to one vote.

Those voting for the bill were: Senators Duncan, Gettelman, Hunt, Mehigan, A. M. Miller, Polakowski, Roberts, H. H. Smith, P. J. Smith—9.

Those voting against the bill were: Senators Barker, Antigo; Boldt, Sheboygan Falls; Cashman, Denmark; Casperson, Frederic; Daggett, Milwaukee; Goodland, Racine; Hutchison, Mineral Point; Johnson, Superior; Keppel, La Crosse; Markham, Horicon; Morris, Milwaukee; Mueller, Wausau; Roethe, Fennimore; Rush, Neillsville; Schuman, Watertown; Severson, Iola; Shearer, Kenosha; Teasdale, Sparta, and White of Winneconne—19.

Absent—Senators Blanchard, Caldwell, Carroll Fellenz and Hall.

Many Bills Introduced

With the dead line for new bills in the Wisconsin legislature closing the middle of April, upwards of 1,500 measures had been presented for consideration. Older members of the legislature declare that it is inevitable that they will have to remain in session until late July or early August.

A Layman Looks at Rural Practice

By MR. THEODORE WIPRUD
Manager Arveson-Diamond Clinic
Frederic

I have often thought that it might prove interesting to physicians to get a layman's view on rural practice. This large and important field is particularly worthy of our most earnest consideration at the present moment. Changing times have brought about a situation in this field which challenges the attention of thinking people, whether or not they are vitally interested in the medical profession.

We are all more or less familiar with the tendency of recent graduates to shun the rural field, turning to large centers where specialized practice is possible. As specialized practice has seemingly been possible only in large centers, many small communities formerly supporting a physician are without one. Young men are seemingly not interested in rural general practice, for reasons which we will discuss later, and older ones who are still carrying on are shrinking in number. I have observed this change in the rural field, not only as a spectator with passing interest, but in recent years as one vitally interested in a unique medical institution in a rural community.

The situation which has existed and is still commonly found in rural communities is so familiar that no one gives it much thought. We usually accept things as we have always known them without thinking much about it. But the health of the community is important, and the best interests of the individual demand better facilities than are often available today. Perhaps I would still have been among the majority of laymen who have not given this much thought had I not become vitally interested in a medical institution. Often now it occurs to me how little thought I gave to the physician and health problems in former days. Being seldom subject to illnesses I made few contacts with the physician. The few contacts which I made, however, come back to me vividly and I recognize more fully the importance of some impressions made upon me. It might be interesting to record some of my reactions as a layman who had no interest in the physician, contrasting them with my reaction to present conditions.

Prior to the war I lived in a small community in a western state. This community was located in the heart of the prairie country with its wide expanse of range, dotted here and there with herds of cattle and horses, but barren of any growing thing save the healthy buffalo grass, typical of that country. Although the country was sparsely settled, and a ride from one ranch to another was quite an outing, the small towns planted at regular intervals along the railroad were of fair size, and sizable enough to support a physician.

ARVESON-DIAMOND CLINIC
A clinic hospital building in a town of 1,000 inhabitants

The community in which I lived possessed a physician of doubtful efficiency and character. He was not exactly bad nor was he good. Many strenuous efforts were made to replace him with a younger and more efficient man, but younger men were not interested in this western community. The barrier, as I see it now, must have been the severe demands of general practice in a rather new country.

I can remember the uneasy feeling which assailed us when illness threatened. My infrequent visits to the physician's office hardly inspired confidence. It revealed clearly the deterioration of the man, who undoubtedly had optimistically embarked on his career, but had stagnated. Dust hung heavily on his office as it evidently did on his brain. From a layman's point of view there was ample evidence in the community of his inefficiency. But what was there to do? Sometime in an emergency he might be a necessity, so everyone was silent as to what he might or might not be. His attitude was known to be tyrannical. Let anyone object to his method or seek aid elsewhere and no call would be answered.

Of course in this western community there was no hospital. Hospitalization was not considered necessary except in a most serious illness, and then it was usually out of reach. The nearest hospital was a hundred miles distant, over roads that were impassable in rainy weather, and difficult to negotiate at any time. Railroad service was poor—a

single train leaving at midnight for the hospital center. Having acquired a family I had more reason for concern than I realized at the time.

Although I had been uneasy about our situation at times, I really became much concerned when my family was first in need of hospital attention. As a matter of policy, and I can assure you with great timidity, I consulted the local physician. I was in real suspense while he cogitated, with his finger hooked over his nose in a characteristic way. Much to my relief he agreed that hospital care was necessary. I can remember still how our anxiety faded as we drew near the hospital.

During my stay in this community I witnessed many deplorable happenings to people not as fortunately situated as we were. Without efficient attention and no facilities at hand their lot was often a hard one.

CLINIC EXPERIENCE

It was my good fortune to come to Wisconsin just following the war, and there to make contacts remotest from my mind. My attention was first attracted to an unusual venture sponsored by two physicians who had formed a partnership. They had built—not remodeled an old building—a modern hospital on a small scale in a community of less than a thousand, and conveniently arranged their offices in the same building. I was not only pleasantly surprised at this find but the discovery gave me a sense of security which has been many times justified. What a contrast to my former community. These men had sensed the possibility of serving their community in a larger way, and the public had put on their stamp of approval.

Like many another such enterprise, the institution struggled along through vicissitudes, particularly as to hospital operation and finances. Gradually it became stabilized and an important factor not only in the community but throughout the nearby territory. It gradually dawned upon these venturesome men that specialized practice might be successful in a small institution, and as a result the first venture was made in surgery.

Having at this time become vitally interested, it seemed to me that the institution had greater possibilities, and with proper management we would offer every facility and service available in many larger institutions. It also seemed that specialized practice, carried further than we had dreamed, would offer the type of service that the modern rural community demands. To this end we have labored. The measure of success we have attained

THE CUMBERLAND CLINIC
An eight room clinic in a town of 1,500 with three physicians and one dentist

we will leave to others to judge. I have, however, arrived at some conclusions as a result of our experience.

CONCLUSIONS

First of all, the rural field cannot be again what it has been in the past. The general practitioner of an older day must give way to a newer order of things. What that order of things will be the next few years will bring forth.

It seems to me that the economic factor is going to play a most important part. We are well aware of the high cost of medical education today. Its cost is so great that the young man is not especially attracted to small communities to do general practice. Years of study without source of income often finds the student in financial difficulties. Somehow he must be financed, and later someway he must obtain funds to return the money borrowed. The large center provides greater possibilities at the present time, and there he frequently goes.

Besides the economic factor there is the urge to specialize. The modern day recognizes the specialist, and the medical profession has been quick to grasp the idea. So it is natural that the young man should select his specialty and turn to some large center.

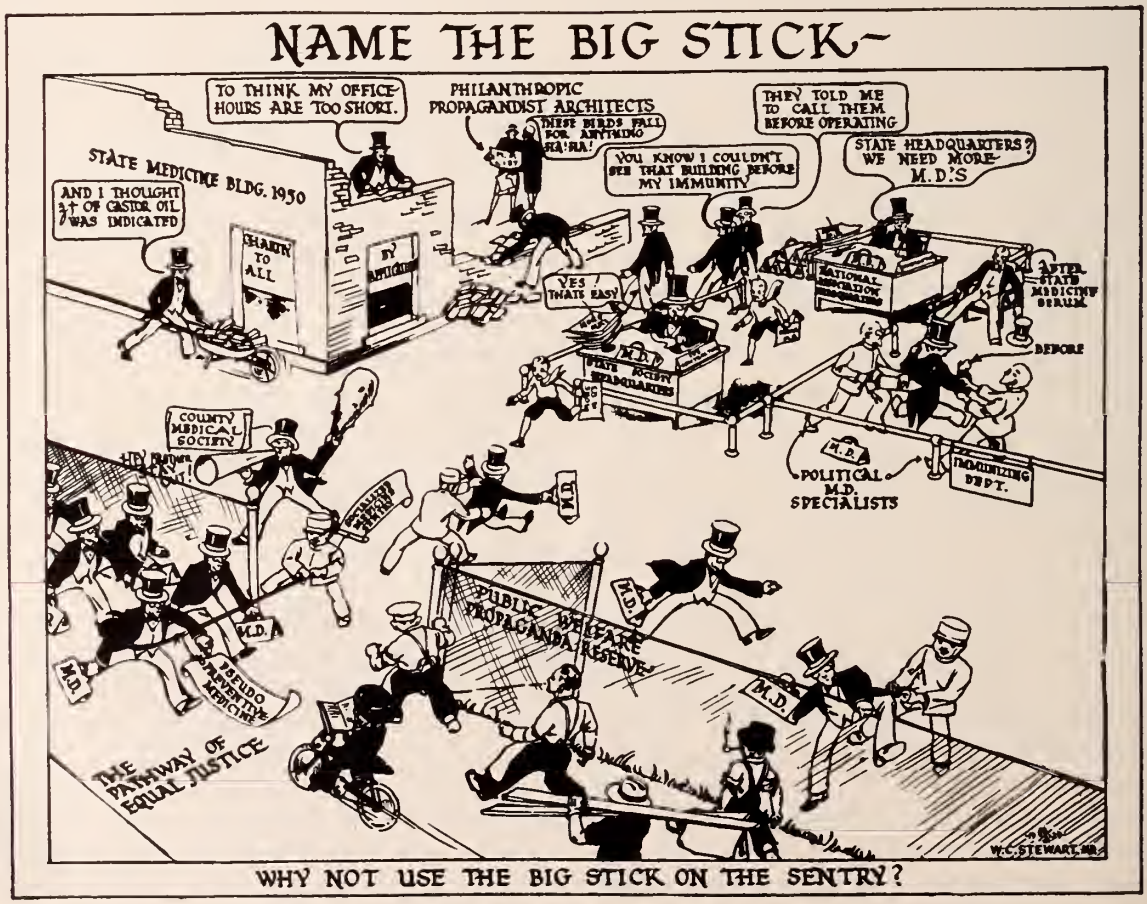
Under these circumstances it seems to me it is logical that future development of rural practice should lie along the line of specialization. Successful efforts which have come within my observation, would justify this assertion. Of course, there are many obstacles to overcome in specialized rural practice. Innovations are always subject to suspicion, and it is difficult to instill confidence. Particularly is it difficult for the physician.

Specialized practice in rural communities would necessitate forming of groups at convenient centers. Such groups could serve an extensive territory, as the rapid development of the roads have made calls even at some distance not difficult to make. Experience, however, has brought out the fact that patients would rather visit the institution housing the group when they are brought to realize that better equipment and facilities are available. Calls drop off as the institution flourishes, and only in severe cases is it usually necessary for the physician to respond.

Another important factor in the development of rural group and specialized practice is the small hospital. The small hospital is in greater favor today than ever before, and properly administered fills the greatest need in any community. My experience has emphasized this in my life. Hospital rates should be within reach of the person of the most ordinary means. That can be brought about by proper management. Hospital rates in the larger centers are on the whole entirely too high. I feel from some investigation that this is generally due to lack of proper business management and to waste. The small hospital can save the patient, first, by eliminating traveling expense and second, by providing hospital care at a more reasonable fee.

It would seem that in addition to the facts mentioned the solution offered would be in the best interests of public welfare. A group of well trained physicians, specializing in a rural community with a well equipped institution suitable to the demands of the territory it serves, would render a great service to a population which makes up a large proportion of our people.

From the physician's standpoint, better service, with adequate facilities at hand, would be possible. His work would also be done under pleasanter circumstances than of old. The greatest obstacle to success would be the attitude of the public toward any pioneer venture. A medical institution in particular finds it slow work to establish itself with the public. But those courageous enough to make the attempt and see it through, I am confident, will be amply rewarded.



WHY NOT USE THE BIG STICK ON THE SENTRY?

Radiological Section Meets at Marshfield May 24th-25th

The annual meeting of the Radiological Section of the State Medical Society of Wisconsin will be held on May 24th and 25th at Marshfield. The section was invited to hold its meeting in that city by Dr. R. P. Potter, of the Marshfield Clinic, who has arranged, in collaboration with officers of the section, the following program:

On May 24th, 2:00 p. m., an address by Dr. K. H. Doege, Marshfield; "The Differential Diagnosis of Renal and Biliary Calculi," by Dr. W. G. Sexton, Marshfield; "The Relationship of Optic Foramen to the Nasal Accessory Sinuses," by Dr. L. A. Copps, Marshfield; "The X-Ray and Chronic Pulmonary Conditions," by Dr. H. M. Coon, Stevens Point; "Skull Fractures," by Dr. A. R. Altenhofen, Milwaukee; "Osteitis Deformans," by Dr. Lawrence V. Littig, Madison.

On the evening of the 24th Dr. K. W. Doege, president of the State Medical Society of Wisconsin, will address the section. After Dr. Doege's address, Dr. Paul C. Hodges, professor of roentgenology at the University of Chicago, will speak on "Intimate Glimpses of Roentgen's Life and Contribution to Science."

The annual business session of the section will be held at 9 o'clock of the morning of the 25th. Dr. Harry R. Foerster, Milwaukee, will address the society at 9:30 on "Cutaneous Malignancy" and following Dr. Foerster's address there will be a round table discussion of cases and films presented by attending members and guests. This discussion will be conducted by Dr. R. P. Potter and each member is expected to present his most interesting or baffling case of the year.

Present officers of the section are: Chairman, Dr. F. W. Mackoy, Milwaukee; vice chairman, Dr. G. W. Stevens, Milwaukee; secretary-treasurer, Dr. F. J. Hodges, Madison. The executive committee, in direct charge of the meeting, is composed of Drs. R. P. Potter, Marshfield; J. C. Baird, Eau Claire, and I. E. Bowing, Kenosha.

AMERICAN PHARMACEUTICAL MANUFACTURERS TO MEET

The Chamberlin-Vanderbilt Hotel at Old Point Comfort, Va., has been selected for the annual meeting of the American Pharmaceutical Manufacturers' Association to be held June 3—6.

The meeting this year will take on an international aspect as invitations have been extended to more than twenty-five leading Canadian manufacturers to attend and participate. Representatives of the British Chemical Manufacturers have also been invited.

Discussion of distribution problems will be one of the principal features of the meeting. This discussion will be led by Mr. Frank A. Mallett of the Standard Chemical Co. of Des Moines, Iowa.

Closely allied to distribution is the work of the publicity committee. Their report will include the results of a survey of the medical profession which has recently been started to improve the service of the association to the profession.

There will be exhibits of medical advertising by some of the members and many practical advertising and publicity problems will be discussed.

The following committees will have charge of the various sections of the program.

Attendance: Bern B. Grubb, Lafayette Pharmacal Co.
Business Policy: J. H. Foy, Maltbie Chemical Co.
Contact: C. E. Vanderkleed, Robert McNeil
(Including report of Research Board)
National Drug Trade Conference: Harry Noonan, Drug Products Co.
Distribution Problems: F. A. Mallett, Standard Chemical Co.
Legislative: C. D. Smith Pharmacal Co.
(Including report of Councilor, U. S. Chamber of Commerce)
Meeting—Annual: H. B. Johnson, Zemmer Co.
Membership: Dr. C. H. Searle, G. D. Searle & Co.
Memorial: B. L. Maltbie, Altamonte Springs, Fla.
Prior Rights Board: R. R. Patch, E. L. Patch Co.
Publicity: F. A. Lawson, E. L. Patch Co.
Research Awards: Dr. A. S. Burdick, Abbott Laboratories
Sales Problems: Dr. H. Sheridan Baketel, Reed & Carnrick
Standardization and Simplification: R. M. Cain, Swan-Myers Co.
Standardization of Glass Containers: C. C. Doll, Zemmer Co.
Trade Names: R. R. Patch, E. L. Patch Co.

Speakers of national reputation have been secured for the annual banquet, which will be one of the features of the meeting.

Under the able leadership of Mr. R. Lincoln McNeil who has been president during the past two years, the A. P. M. A. has been very active in all departments of its work. The annual meeting at Old Point Comfort bids fair to be the most successful in the history of the Association.

THE JOURNAL BOOK SHELF

Bronchial Asthma. Its Diagnosis and Treatment. By Harry L. Alexander, M. D., associate professor of medicine in the Washington University Medical School, St. Louis, Mo. Illustrated. Price $2.25 net. Lea & Fehiger, Philadelphia.

Acute Infectious Diseases. By Jay Frank Schamberg, M. D., professor of dermatology and syphilology in the Graduate School of Medicine, U. of Penn., and John A. Kolmer, M. D., professor of pathology and bacteriology in the Graduate School of Medicine, of the U. of Penn. Second edition, thoroughly revised. Illustrated with 161 engravings and 27 full-page plates. Price $10.00 net. Lea & Fehiger, Philadelphia, 1928.

Pediatrics for the General Practitioner. By Harry Monroe McClanahan, M. D., professor of pediatrics emeritus, University of Nebraska. Two hundred and thirty illustrations. Price $6.00. J. B. Lippincott Co., Philadelphia and London.

History of Medicine, With Medical Chronology. Suggestions for study and bibliographic data by Fielding H. Garrison, M. D., Lt. Colonel, Medical Corps, U. S. Army, Surgeon-General's Office, Washington, D. C. Fourth edition, revised and enlarged. Octavo of 996 pages, with 286 portraits and other illustrations. W. B. Saunders Company, Philadelphia and London, 1929. Cloth, $12.00 net.

Blood. A study in general physiology. By Lawrence J. Henderson, professor of biological chemistry in Harvard University. More than 200 illustrations. Price $5.00. Yale University Press, New Haven, 1928.

Partnerships, Combinations and Antagonisms in Disease. By Edward C. B. Ibotson, M. D., Fellow Royal Society of Medicine, London. Illustrated. Price $3.50 net. F. A. Davis Company, Philadelphia.

Laboratory Manual of the Massachusetts General Hospital. By Roy R. Wheeler, M. D., and F. T. Hunter, M. D. Second edition, enlarged and thoroughly revised. Price $1.75 net. Lea & Febiger, Philadelphia.

Compend of Diseases of the Skin. By Jay Frank Schamberg, M. D., professor of dermatology and syphilology, Graduate School of Medicine, University of Pennsylvania. Eighth edition, revised and enlarged with 127 illustrations. Price $2.00 net. P. Blakiston's Son & Co., Philadelphia.

Outlines of Pathology in its historical, philosophical and scientific foundations. A guide for students and practitioners of medicine. By Horst Oertel, Strathcona professor of pathology, McGill University, Montreal. Renouf Publishing Company, McGill College Avenue, Montreal.

Thrombo-Angiitis Obliterans. Clinical physiologic, and pathologic studies. By George E. Brown, M. D., and Edgar V. Allen, M. D., Division of Medicine, Mayo Clinic; collaborating in pathology with Howard R. Mahorner, M. D., Mayo Foundation. 12mo of 219 pages with 62 illustrations. Price $3.00 net. W. B. Saunders Company, Philadelphia and London.

The Blood Plasma in Health and Disease. By J. W. Pickering, D. Sc., lecturer on Haematology, University of London, King's College. The Macmillan Company, New York, 1928.

A Text-Book of Surgery. By W. Wayne Babcock,, M. D., professor of surgery and clinical surgery in the Temple University, Philadelphia. Octavo of 1367 pages with 1,050 illustrations, 9 of them in color. Price $10.00 net. W. B. Saunders Company, Philadelphia and London, 1928.

Problems in Surgery. University of Washington Graduate Medical lectures for 1927. By George W. Crile, M. D., edited by Amy F. Rowland. Octavo volume of 171 pages, illustrated. Price $4.00 net. W. B. Saunders Company, Philadelphia and London.

Thyroxine. By Edward C. Kendall, M. S., the Mayo Foundation, Rochester, Minnesota. Price $5.50. Book Dept., Chemical Catalog Co., Inc., New York City, 1929.

BOOKS RECEIVED FOR REVIEW

Technique of Contraception. By James F. Cooper, M. D., medical director of the Birth Control Clinical Research Bureau; clinical instructor in Obstetrics, Boston University Medical School. Day-Nichols, Inc., Publishers, 15 East 40th St., New York City.

Report of Fourth International Congress of Military Medicine and Pharmacy, Warsaw, Poland, May-June, 1927. By William Seaman Bainbridge, Commander, U. S. Naval Reserve. George Banta Publishing Company, Menasha, Wis.

The Injection Treatment of Hemorrhoids. By Charles Conrad Miller, M. D. Modern Surgery Publications, Chicago, 1929.

The Writing of Medical Papers. By Maud H. Mellish-Wilson, editor of the Mayo clinic publications. Third edition, revised. 12mo. of 184 pages. Cloth, $1.50 net. W. B. Saunders Company, Philadelphia and London.

Old Age. The Major Involution. The physiology and pathology of the aging process. By Aldred Scott Warthin, M. D., professor of pathology and director of the Pathological Laboratories in the University of Michigan, Ann Arbor. With 29 illustrations. Price $3.00 net. Paul B. Hoeber, Inc., New York.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Secretary, Mr. J. G. Crownhart, 119 E. Washington Ave., Madison, Wisconsin. These new books will be loaned for an inspection period only.

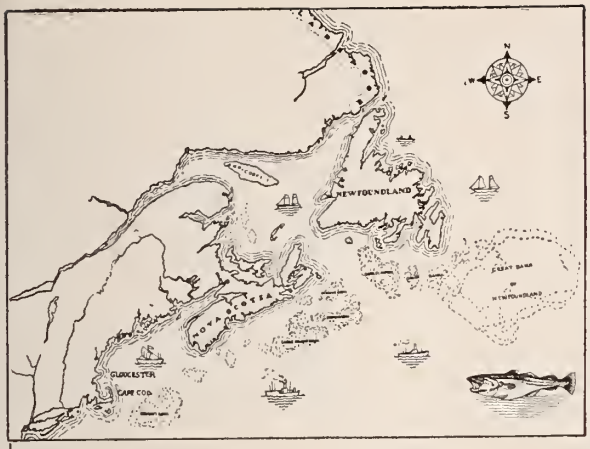
The Technic of Local Anesthesia. By Arthur E. Hertzler, M. D., professor of surgery in the University of Kansas. 4th edition with 146 illustrations. Price $6.00. C. V. Mosby Co., St. Louis, 1928.

This text is arranged in excellent sequence and covers adequately the problems arising in the use of local anesthesia. Fortunately for those of us not especially blessed, the author does not maintain that one can always strike nerves three or four inches beneath the skin and thus secure complete anesthesia with a few cubic centimeters of novocain. The limitations of local anesthesia are enumerated in sufficient detail to avoid undue enthusiasm.

Spinal anesthesia is dealt with in a few paragraphs which hardly cover such an important subject. There is no method described for obtaining anesthesia of the upper abdomen by intraspinal injection.

The author very properly leaves considerable doubt in the mind of the reader as to the value of splanchnic anesthesia.

This book is an excellent guide to the use of local anesthesia. It is brief, and the text is plain and to the point.—F. R.



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Regional Anesthesia. By Gaston Labat, M. D., clinical professor of surgery, University and Bellevue Hospital Medical College, New York City. With a foreword by William J. Mayo, M. D. Second edition, revised. Octavo of 567 pages with 367 original illustrations. Price $7.50. W. B. Saunders Co., Philadelphia and London, 1928.

In presenting the second edition of "Regional Anesthesia" the author had made a complete revision of the text.

Changes in technic for blocking the nerves of the head were rendered necessary by the introduction of newer and more accurate devices for taking landmarks. Two sets of instruments have been added to the paraphernalia in order to facilitate the injection technic.

The sections on cervical plexus block and brachial plexus block have been retouched with new material produced in the laboratory and brighter colors given to their clinical picture.

The chapter on subarachnoid block (spinal anesthesia) has been entirely rewritten in the light of our present knowledge of the physiology of the method; that on sacral block enlarged by the addition of such technical details as would render puncture of the sacral canal a safe and easy procedure in hands of the novice.—S. J. S.

The Climacteric (The Critical Age). By Gregorio Maranon, professor of medical pathology in the Madrid Gen. Hospital, member of the Royal Natl. Academy of Medicine. Translated by K. S. Stevens and edited by Carey Culbertson, M. D., associate clinical professor of obstetrics and gynecology, Rush Medical College of the University of Chicago. Price $6.50. C. V. Mosby, St. Louis, 1929.

At the very beginning of the first chapter the author makes clear the distinction between "the menopause—an isolated phenomenon, the physiologic cessation of the menstrual flow, and the critical age, or climacteric—a period of life characterized by a complexity of phenomena, the central symptom of which is precisely this menstrual cessation, but which is accompanied by many other disturbances such as those of a circulatory and nervous nature."

The author believes that in climacteric pathology emotion plays a particularly intense and definite role. And he deals with this subject at some length, taking up the points in question in the following order:

1. Intervention of the endocrine-vegetative factor in the emotional act. Emotional predisposition and internal secretions. Endocrine-vegetative mechanism of the pathologic disturbances of emotional origin.
2. State of the endocrine-vegetative system in the climacteric age. The critical age is the one of greatest emotional instability.
3. Increase of emotional attacks in the climacteric.
4. Clinical facts: coincidence of the climacteric and grave emotional attacks in the etiology of symptoms proper to this age.

The author's thesis for demonstration is as follows: "The pathogenic mechanism of climacteric symptomatology is not limited to insufficiency of the genital gland, as has been held, but it is rather the expression of a complex endocrine crisis, which varies in different individuals. In this crisis the outstanding feature is gonadal insufficiency to be sure, but other glandular disturbances occur coincidently and form an essential part of the crisis. Our knowledge concerning some of these various glandular disturbances is now fairly well established. * * * We know that the vegetative nervous system functions in intimate and inseparable connection with all the glands of internal secretion, and, in turn, the secretion of these glands affects the functioning of the nervous system."

One chapter is devoted to the critical age in the male. The author explains the clinical differences which the critical episode has in the man and in the woman. The climacteric, or second (adolescence being the first) critical age is "a necessary phenomenon in the evolution of every human being who reaches old age, be it man or woman. The biologic foundation of the feminine climacteric—genital decadence and secondary neuroendocrine reactions—also exist in the male. The different somatic and functional conditions of each sex (detailed in Chapter xiv) explains the clinical differences which the critical episode has in the man and in the woman."

The Critical Age is a comprehensive and scientific modern study of the climacteric transition. The author has presented his subject matter in an interesting and readable form, "writing from the general practitioner's point of view and for all physicians." There are 18 illustrations in the book and the bibliography is extensive. The last two chapters are devoted entirely to treatment, increasing greatly the practical value of the book.—A. McI.

Imperative Traumatic Surgery with Special Reference to After Care and Prognosis. By C. R. G. Forrester, M. D., consultant, teaching staff, Illinois Post Graduate School, Chicago. Illustrations, 598. Price $10.00 net. Paul B. Hoeber, Inc., New York, 1929.

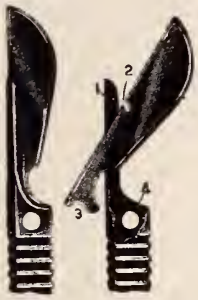
This book refutes a rather current opinion that there is no such special field as the surgery of accidents. We fell heir to this work with the advent of the age of machinery. The author's years of traumatic surgery have shown him new demands on his ability to diagnose and improvise, not met or covered by earlier writers. Most of us interested in this surgery have scant time for book writing, and send our contributions to the journals. Dr. Forrester has taken time and thought to give us one of the few American monographs devoted to the work so many are now meeting. It will therefore be very helpful and a wide circulation is predicted.—E. A. S.

Physiology of Bone. By R. Leriche and A. Policard. Translations by Sherwood Moore, M. D., and J. Albert Key, M. D., of Washington University School of Medicine. Illustrated. Price $5.00. C. V. Mosby Company, St. Louis, 1928.

This is a notable, much needed contribution to the meager knowledge of osteology; useful to the histologist, teacher or student, surgeon. It will serve as a safe ground work for investigators in this comparatively unexplored but fertile field of science, and offers the surgeon about all that is known for his guidance and assurance in bone reconstruction.—E. A. S.

The Elements of the Science of Nutrition. By Graham Lusk, professor of physiology at the Cornell University Medical College, New York City, 4th ed., reset. Octavo

THE LAST WORD IN A KEEN, NEW BLADE AT LESS COST THAN SHARPENING A SCALPEL



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of 844 pages. Price $7.00 net. W. B. Saunders Co., Philadelphia and London, 1928.

Prof. Lusk says that this is positively the last revision of his splendid book which has been for twenty years the most authoritative work on nutrition in the English literature. The reviewer expresses the hope that this is really not the final revision.

In the twenty years since the first edition an enormous amount of work has been done but we are yet far from the solution of many problems. The advent of biochemistry was expected to elucidate many problems. The distressing fact is that often it has rendered the situation more obscure.

It is surprising that out of the truly enormous mass of literature Prof. Lusk has been able to steer a course through it, giving us a book which has no peer in its field.

There are some important additions to the chapters on metabolism and some revisions of its theories. The first chapter is still the fascinating introduction to the subject of nutrition. This is changed here and there by the addition of new material, but it still remains the keynote of the book.

We think that this book should be in the library of every progressive physician.—L. M. W.

THERAPEUTIC NOTES

New and Nonofficial Remedies

In addition to the articles enumerated previously, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Haley M-O Co.:
  Magnesia-Mineral Oil (25) Haley.
H. K. Mulford Co.:
  Perfringens Antitoxin—Mulford.
National Drug Co.:
  Diphtheria Toxin-Antitoxin Mixture.
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    Sulpharsphenamine—Searle, 0.6 Gm. Ampules.

"COUNCIL PASSED"

Notification is being sent to the medical profession that the well known and deservedly popular Haley's M-O, Magnesia Oil has been accepted for N.N.R of the American Medical Association. Henceforth the product will be known as Magnesia-Mineral Oil (25) Haley. It was certainly a happy thought to combine Liquid Petrolatum and Milk of Magnesia in the form of a permanent, uniform, unflavored emulsion. The taste is not at all unpleasant and the absence of any distinct flavor prevents the habitual user from growing tired of it.

The value of mineral oil as a lubricant and emollient for the treatment of certain forms of obstipation has been well established. In many cases, however, there is added to the need for lubrication the indication for the use of a mild laxative and antacid for which purpose years of clinical use have demonstrated Milk of Magnesia to be ideal.

Practically, there exists in many cases of intestinal stasis and constipation a hyperacid condition which calls for the use of an antacid.

Magnesia-Mineral Oil (25) Haley has therefore a therapeutic field considerably broader and more diversified than is the case with either one of its ingredients considered singly.

The makers of this product were prompt to realize this but were also well aware that skepticism or doubt is apt to be aroused when the number of indications for the product is large.

As evidence of good faith and entirely in the interests of the medical profession, numerous questionnaires have been sent out from time to time, giving the physician an opportunity to indicate exactly under what conditions his use of Magnesia-Mineral Oil (25) Haley proved most satisfactory. Response to these questionnaires has been prompt and numerous.

Tabulations have been carefuly made of the replies received from physicians and only those indications mentioned in the literature which proved to have been common to a large number of doctors. In this way it is believed, undue claims have been avoided and the doctors have been given reliable information based upon actual clinical use.

The same method has been employed in the case of the dental profession, because dentists have been prompt to recognize the value of Magnesia-Mineral Oil (25) Haley as an antacid mouth wash. The advertising of this product has been kept within strictly ethical limits. The mails have been used regularly and, judging from the comments received from thousands of physicians, the attempt to call attention to Magnesia-Mineral Oil (25) Haley by the use of something different and original in the form of printed matter has been well received. The little booklet, "A Gift from the Gods" met with a very flattering reception and in the near future another feature will be sent to every physician in this country which will undoubtedly be not only welcome but given a permanent place in the doctor's waiting room, private office or home.

Another policy of the makers of this product is to be generous in the matter of samples for clinical trial and requests for same are always given prompt attention. The Haley M-O Co. Inc., Geneva, N. Y.

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Leukorrhea, A Neglected Symptom

By CARL HENRY DAVIS, M. D.
Milwaukee

Leukorrhea is an objective expression of a diseased condition. That it is fairly common is recognized by every physician. A review of 1000 histories of gynecological and obstetrical patients indicates that about 33 per cent of the women who consult me have some type of leukorrhea. It varies greatly in consistency and amount. A considerable number of women must wear a sanitary napkin at all times, others try to keep clean through frequent use of a douche.

The occurrence of a more or less frequent, or a constant vaginal discharge sufficient in amount to keep the external genitalia moist and soil the underclothing is abnormal and requires careful investigation. The cause as well as the source of an abnormal discharge must be determined before it is possible to institute rational treatment.

Leukorrhea is a symptom which is common to many different conditions. This is probably the chief reason for the average physician's indifference to it. In view of the inadequate discussion of this subject in text-books it seems worth while listing its probable etiological causes and associated conditions. For convenience these may be tabulated under four headings.

(a) Parasitic and Infective
(b) Local
(c) Constitutional
(d) Circulatory

Infective and parasitic conditons which have been found in the genital tract include the following:

Venereal Diseases
- Gonococcus
- Spirochaeta pallida
- Ducrey's bacillus

Pyogenic bacteria
- Staphlococcus
- Streptococcus
- B. Coli
- Pneumococcus

Micrococcus catarrhalis
Vincent's bacillus
Saprophytes

Rare infections
- B. tuberculosis
- B. aerogenes capsulatus
- B. diphtheria
- B. tetanus
- B. typhosus

Protozoal infections
- Trichomonas vaginalis
- Amoeba urogenitalis?

Vermian infections
- Oxyuris
- Ascaris
- Echinococcus
- Filaria bancrofti

Trush—Oidium albicans
Streptothrix infections—Actinomyces

Infection of the genital tract with any of the above would produce an abnormal discharge.

LOCAL CAUSES

Conditions with the genital tract which are associated with more or less leukorrhea include the following:

Endocervicitis
Cervicitis
Cervical ectropion and erosion
Lacerations of the cervix
Polypi
Vaginitis
Uterine retrodisplacements
Uterine subinvolution
Foreign bodies
Chemical irritants
Adenomata
Endometrioma
Senile vaginitis
Senile endometritis
Cancer of cervix
Cancer of corpus
Sarcoma
Syphilis of cervix
Tuberculosis of cervix
Tuberculosis of endometrium
Tubal disease
Fistulae

It should be remembered that bacteria or para-

sites may be associated with any of the above in the production of the abnormal discharge. Several causes may co-exist and an evaluation of their relative importance is necessary before starting treatment.

Constitutional Predisposing Causes:

Anemias—such as chlorosis and pernicious anemia

Endocrine disturbances

Debilitating infections

A leukorrhea occurring as a complication of the above may not yield to the ordinary methods of treatment unless the constitutional condition is improved.

Circulatory Causes:

Cardiac disease with vascular stasis

Hepatic disease with portal stasis

Pelvic congestion is a natural result of the above circulatory disturbances. A chronic pelvic congestion will cause some discharge and may greatly increase an existing discharge.

A careful pelvic examination is an essential part of the complete physical examination of a woman patient. In the development of the periodic health examination idea negative findings should be recorded as they may be of material importance at a later date. After the bimanual examination a suitable speculum should be inserted and the vaginal wall and cervix inspected. In every case it is thought advisable to obtain a loop of secretion from the vaginal vault and, after diluting it in normal salt solution, examine it while fresh under a moderately high power of the microscope. Stained specimens are needed to determine the type of bacteria which may be present, but other information is more easily obtained from diluted fresh secretion. Parasites such as trichomonas vaginalis are rarely diagnosed by physicians who depend on stained smears. They may easily be overlooked in a fresh smear unless the material is well diluted and examined before it dries.

A vaginal discharge may vary greatly in consistency and color. It may be thick or thin. According to the prevailing types of bacteria and the amount of mucus, epithelial cells, pus, blood, or urine in the mixture; it may be white, yellow, grey or green. It may be odorless or more or less offensive. A cervical discharge is mucoid or mucopurulent and usually stringy. A discharge from the vaginal mucosa is serous and more uniform in consistency. Usually it is thin and milky. In cases with marked pelvic congestion white curds may be formed by the mixing of a serous discharge with an excessive number of epithelial cells. This is freqeuently observed during pregnancy and at times as a stage in the healing of a severe vaginitis. A watery discharge may be due in part to contamination with urine which escapes through a fistula of the bladder or ureter. On the other hand, it may be serosanguineous and come from a malignant growth. An abundant greenish-yellow discharge is suggestive of acute gonorrhoea. A persistent profuse yellow or white discharge which causes a marked irritation of the vagina and external genitalia is usually due to the trichomonas vaginalis. This discharge resembles that of gonorrhea and is frequently mistaken for it. A purulent discharge may arise from infection in any of the genital organs. It may follow the natural passages or a fistulous tract. Less often a fistula may lead to an abscess in other tissues, as an appendiceal or pelvic abscess, or a pyo-ureter. Pyometra is usually observed after the menopause. A foul smelling discharge in a young woman usually is due to infection, incomplete abortion or a foreign body. A tampon or a piece of gauze left in the vagina for a few days will cause a very offensive odor. In older women a foul smelling leukorrhea may be due to a foreign body, a sloughing fibroid or a late stage of malignant disease.

It may be difficult at times to determine the source of a discharge. One of the writer's patients thought she had incontinance of urine when she developed a serous discharge from a malignant growth in the uterus. A dry tampon was introduced into the vaginal vault and a few hours later it was possible to convince her that she did not have incontinance. A panhysterectomy was performed and an early adenocarcinoma of the corpus uteri demonstrated. The dry tampon recommended by Schultze is useful also in determining whether the leukorrhea comes from the cervix or vagina. A watery discharge is an earlier sign of cancer than hemorrhage.

The probable source and cause of leukorrhea varies materially with the age of the patient. In children it usually comes from the external genitalia. Soiled diapers, acid urine, worms, gonorrhea or other infections and masturbation are the usual causes. Gonnorrheal vulvovaginitis is generally believed to be the most common as well as the most difficult to treat. Smears are often misleading and

cultural studies are advised since the infection may be due to the micrococcus catarrhalis.

After puberty an abnormal discharge may come from any part of the genital tract. The cervix is the most common source. Among married women labor and abortion are probably the usual predisposing causes. Excessive or abnormal coitus may be responsible. A very profuse leukorrhea always suggests the possibility of infection with the gonococcus or the trichomonas vaginalis. In older women senile changes in the vulva, vagina and endometrium may cause trouble, but the possibility of cancer must be in one's mind at all times and the patient kept under observation until it has been eliminated.

A relatively common cause of persistent abnormal vaginal discharge is the trichomonas vaginalis which was first described by Donné in 1837. Brumpt found this flagellate in the vaginal secretions of 10 per cent of the women examined at a gynecological clinic in Paris. During 1928 I diagnosed trichomonas vaginalis vaginitis in 43 patients at my office, and several other cases were observed elsewhere. As previously stated this parasite has been found rarely by most physicians, due to the general use of stained smears which are usually examined only for the gonococcus. Fresh diluted vaginal secretion should be studied in every case if one wishes to determine the presence or absence of parasites and know the proportion of epithelial cells, pus and blood in a given discharge. However, a patient should be instructed to avoid douching for at least two days before such a study is attempted. The trichomonas vaginalis parasites are usually present in large numbers in untreated cases. After treatment has been started they are apt to be abundant just after a menstrual period since the blood in the vagina during the period makes an ideal culture media. Both patient and the physician may become discouraged with the frequent reappearance of parasites following a period. Treatment in these cases must be continued until pus cells have disappeared from the vaginal secretions and there is no evidence of the trichomonads following two or more periods.

Yeast or thrush infections of the vagina are probably more common than any of us realize. Within the past year Cron diagnosed thrush vaginitis in three pregnant women. A more careful study may show that the frequent outbreaks of thrush infections in the mouths of newborn infants may come primarily from a mother's vagina. Yeast infections are observed for the most part in older women with the type of vaginitis we are apt to associate with senile changes. The secretions of these women show many pus and red blood cells associated with yeast cells, and the vaginal mucosa may be markedly inflamed.

An accurate diagnosis should precede any attempt to treat leukorrhea. It is probable that every physician has been somewhat careless in his attitude toward this symptom which is common to so many different conditions. Kelly has well said: "It is the thread which the gynecologist must take up and follow until he traces the trouble to its source and eliminates it by the appropriate remedies."

TREATMENT

The treatment of leukorrhea may be divided into a consideration of measures which give temporary relief of acute symptoms and those which are directed toward the removal of the underlying cause. It is unfortunate that so many physicians have been content with the advice of some type of vaginal douche. Regardless of the medication used this is only an expedient which gives temporary relief of some acute symptoms and while it may be of distinct value in the treatment of trichomonas vaginalis and a few other forms of vaginitis, its general use should be discouraged. A cleansing, nonirritating irrigation administered by a nurse is soothing and may be beneficial during the acute stage of an infection, but this is probably less important than rest in bed and postural drainage. The external genitalia should be kept clean with liquid soap and water. After the acute symptoms of vaginitis have subsided a clean speculum of suitable size may be inserted and the vagina carefully dried with sterile cotton pledgets. Following this I usually paint the entire vaginal mucosa with a non-irritating antiseptic. A 5 per cent. mercurochrome solution has advantages over the silver salts and iodine. Icthyol glycerine tampons may at times hasten healing but when there is an abundant discharge, as in acute gonorrhoea, they are of doubtful value and may do harm by damming back the discharge. Satisfactory treatment of a chronic leukorrhea depends on removal of the underlying cause. Tampons and douches are of doubtful value and their use is rarely advised. Chronic endocervicitis, which is the most common cause of chronic leukorrhea, can as a rule be corrected by

electric cautery treatment which has been discussed in a number of papers during recent years. Surgical removal of the diseased cervical glands by the Sturmdorf or Schroeder technic is indicated in a smaller number of cases. The possibility of discharge from Skene's ducts or the Bartholin glands must be kept in mind. These may be destroyed by a fine tipped cautery. However, surgical removal of chronically infected Bartholin glands may give more satisfactory results.

Theoretically, it should be possible to destroy the trichomonas vaginalis in a single thorough treatment of the vagina. Unfortunately, this is not the case and some women may require frequent treatments for many months. Trichomonads are injured by heat or cold, and are quickly killed by drying powders and a variety of antiseptics. No single plan of treatment is applicable to every case, and as previously stated treatment should be continued until the vaginal mucosa has healed, and there is no reappearance of the parasites following a menstrual period. The post-menstrual test must be made before the patient has used a douche. This should be repeated each month for several months before one may be sure that there will not be a relapse.

It is obviously impossible to discuss the treatment of every condition which may contribute to abnormal vaginal discharge in a short paper. My purpose today has been to urge its importance as a symptom of disease. When this is more fully appreciated by both physician and layman, earlier diagnosis of uterine and cervical cancer will be possible, and many chronic irritations which may result in malignant disease will be cured while in a benign state.

Osteomyelitis; The Treatment of Acute and Chronic Osteomyelitis by Drainage and Rest Instead of by Irrigation and Antiseptic Dressings*

By H. WINNETT ORR
Lincoln, Nebraska

During the past two years, in the treatment of compound fractures, infected fractures, infected joints, and infected wounds in general, certain methods have been held out to us as being the result of what we learned during our recent military experience. For example, we have been told by those in a position to speak with authority that the immobilization of fractures is not so important or so necessary as we have long been taught. We have been told that immobilization in the treatment of infected joints, acutely suppurating joints, is not necessary; that these joints may be treated constantly, or more or less constantly in motion. We have even been told that compound fractures involving joints in which infection has become established need not be immobilized.

Finally, we have been told that the treatment of all infected wounds including osteomyelitis is best done by a highly developed system of antiseptic irrigation, packs, poultices and frequent dressings. You will find that sort of thing all through the literature of the surgery of the war, during the war and since. To some of us those lessons were not the lessons of the war at all. We have found—at least we think we have—that teaching to be wrong, and it is for the purpose of demonstrating to you that those methods are wrong that I venture to come here this afternoon.

We believe, for example, that immobilization of all fractures is necessary. You can occasionally get by without it, but to obtain uniform standard results good immobilization and good splints, much better than we have been accustomed to use, are essential. We believe that any results in infected fractures or in suppuration of joints which you get with motion may be obtained more easily, more certainly and more consistently with adequate immobilization. Finally, we have come to believe that the treatment of wounds, especially of wounds of joints, by means of antiseptic irrigation, packs, poultices, and frequent dressings not only is not as good as we have been led to believe but in most cases antiseptic irrigations, packs, and frequent dressings do more harm than good, and that the patient will do better without them.

If one turns back to the teachings of Sir Joseph Lister, to whom we are indebted for the so-called antiseptic system, we find that Lister enunciated certain principles we have apparently forgotten about. He taught that in treating wounds with antiseptics two or three points must be observed. He said, first of all, that antiseptic chemicals should not be applied directly to wound surfaces. He said that wound surfaces should not be exposed

*Presented before 87th Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, Sept., 1928.

frequently because of the danger of introducing new kinds of infection different from that with which we are called upon to deal primarily. Finally he pointed out that rest is necessary to secure healing either in ordinary infected wounds or in compound fractures. Most of us have been using dressings so frequently that the wound has no chance to rest at all.

In treating compound fractures, by the Dakin method, so popular during the war and since, one finds that he is required to expose the wound, frequently including the bone, for the application of the Dakin solution properly and the dressings are so wet and the wetting is repeated so frequently that one constantly disturbs not only the wound but the injured parts as well. As an orthopedic surgeon, I have been trained in the use of plaster. One of the first things I was told when I entered the military service was that plaster of Paris could not be used as it was incompatible with the requirements of the antiseptic dressings. Since we have found, as we think we have, that the antiseptic dressings are not necessary (not only are not necessary but actually injurious) we use our plaster casts more and more. We used casts during the military service in France and in this country.

We now put on the cast using no wet dressings, no irrigation and depend on the cast and the patient to do the necessary repair work, not on the antiseptic solutions. In osteomyelitic treatment, which is an outgrowth of the other experience, it has become even more striking and more spectacular. If one takes, for example, a child acutely sick with an osteomyelitis of the femur, open up the bone abscess so as to afford drainage to the medulla, and if the bone cavity and the cavity of the soft parts can be filled at once, with non-antiseptic non-absorbent dressing like vaseline, no chemicals at all, the child can be put into a plaster cast from his toes to his axilla and can recover without any dressings at all.

Instead of using the drainage tubes and wet packs and irrigation, to which we have been accustomed, and the daily dressings, we may, I think, point out that the drainage tubes, irrigations, wet dressings, etc., which constitute a program of disturbance have not only been unnecessary but harmful. Any one who has seen a child go through osteomyelitic treatment screaming every time the physician or nurse came near, and then if he can see a similar case with the wound packed with vaseline, the cast put on and the child not disturbed for a month or six weeks, finding him practically well, will see what I mean. That has been done many times.

The ostemyelitis patient affords the most striking and most spectacular illustration of what I mean, but the thing works as well or better in a chronic ostemyelitis or compound infected fracture than it does in the acute osteomyilitis and it is easy to prove.

Having stated my proposition, I will run through a few slides to illustrate the method and show some illustrative cases. And I shall be glad to have discussion or questions if I have not succeeded in making myself clear.

DISCUSSION

DR. F. J. GAENSLEN (Milwaukee): I think we are fortunate in having Dr. Orr with us. I believe he has made a very remarkable contribution to surgery. No doubt, from what he has said and judging from the cases he has shown that fact has already dawned on you.

You may be a little skeptical, as I was when I first heard of this method which is so radically different from everything you have been taught. Here is what Dr. Orr proposes that you do. In a case of acute osteomyelitis, in a patient with high fever and all the symptoms and distress associated, he asks you to open the cortex into the marrow, to provide escape for the pus, to put a vaseline pack into the wide open wound, to put on a plaster cast to immobilize the joints above and below and then to let the child alone. I had a very wholesome fear and respect for any such procedure. If I had not known Dr. Orr as well as I do, I certainly would not have tried it. In fact after reading his paper I laid it away for a whole year, until I saw him and then discussed it with him.

When I found he had obtained good results in case after case, I tried the method although it did seem out of line with some of the principles of surgery I had learned.

There are really three factors which are important in his method. The first is drainage. Now in acute osteomyelitis the only thing to do is to cut down to pus, open the cortex to provide adequate drainage and leave it alone. Do not try to remove all of the diseased bone. Nobody knows how much bone is going to live and how much is going to die. That is your drainage operation. Wait until your x-rays and other further clinical studies tell you when to do the final or radical operation. Sometimes it is not necessary to do that. Sometimes after very early drainage operation healing results, but as a rule the case goes on to the so-called chronic stage requiring radical operation. Clinical studies including x-ray will indicate to you when this is to be done. In these cases thorough removal of all dead bone is essential. There has been sufficient time for the sequestrum to separate completely. Through an incision of ample length the bone is exposed and a sufficient opening is made in the bone to lift out the sequestrum. The

opening should be a long shallow one with gently shelving edges to promote filling in with soft parts.

Next is adequate drainage. This is provided for in the Orr technique by vaseline gauze packing filling the wound completely. The angles of the wound should not be sutured, the wound being left wide open.

The third element is rest. I am firmly convinced that this is extremely important. It is insured by enclosing the limb in plaster including the joints above and below the lesion for complete immobilization. No window is cut in the cast for dressing, the wound being completely covered by the cast. We have no hesitation after radical operation in cases of chronic osteomyelitis in sending these children home from the hospital after two to five days to return for removal of cast in two to four weeks.

When comparing the earlier methods of treatment involving daily dressings, time and trouble on the part of the surgeon and pain and discomfort on the part of the patient with the method just outlined, I am sure you will feel that Dr. Orr's contribution is deserving of grateful recognition.

I had been a very firm believer in the Carrel-Dakin method. It has given me excellent results. But the Orr treatment is so much superior to it that I have used the latter method exclusively since 1923.

There is some odor to these dressings naturally. You have a certain amount of seepage in the dressings, and if you do not dress the wound for four weeks the odor is annoying. But you should be able to put up with a little odor if you feel you are going to get good results in the end and you invariably do, provided you have fulfilled these postulates, adequate surgery to removing all the diseased bone, adequate drainage and complete immobilization. In cases of compound infected fractures the same principles are used and the same good results are obtained. Dr. Orr showed on the screen cases of compound fracture treated during the World war by traction in Balkan frame with multiple weight and pulley arrangements. These frequently get out of order and require much attention on the part of both nurses and internes. Comparing these methods with the treatment outlined by Dr. Orr, the simplicity of the latter method should make a strong appeal, especially as the patient's comfort is practically assured from the first day and in view of the fact that the functional results are excellent.

We have used the method in several cases of acute septic arthritis of the knee. Adequate drainage was insured by incisions made on either side of the patella. The vaseline was applied over the open wound and a plaster cast applied. Recovery was uneventful though with ankylosis as was to be expected. Occasionally the Willem's method of active motion of the joint immediately after incision for drainage is successful, but these cases are excessively rare. I have one such case in which motion is perfect. But in all others in which it was tried the Willem's method had to be discontinued because of excruciating pain.

I recall another case which may interest you, a young man falling from a tree, fractured his leg. He dragged himself three-quarters of a mile to the nearest house, where he received first aid. He was taken to a hospital where the femur was plated and a cast was put on. Later the cast broke, and the wound became infected. When he came to me, there was a Lane plate on the femur, a discharging sinus, osteomyelitis of the bone ends and no attempt at union. On the day he came into the hospital, the wound was opened, the Lane plate was taken out, the bone ends were cleared of dead bone, the wound was packed with vaseline packs, and a plaster cast was applied without any windows for dressing. He was kept in that for a number of weeks, and redressed only once or twice more with permanent closure, union of the fracture and good function resulting.

I want to repeat I think Dr. Drr has rendered a remarkable service to surgery, and I for one am very grateful to him. (Applause).

DR. E. J. CAREY (Marquette University, Milwaukee): I was very much interested in the fundamental principles enunciated by Dr. Orr and mentioned by Dr. Gaenslen, of Milwaukee. It is a return to the advocacy of physiologic rest, by John Hilton, 1853, London and Hugh Thomas of Liverpool in 1880 in the treatment of both simple and infected fracture. Thomas advocated absolute, unmitigated rest and preached it probably at that particular time more than anybody else and attempted to get this rest in repair by external splints. Lane 1894 of Guys Hospital attempted to get still more rest by internal splints, yet we know in his particular case he immediately became involved with the regenerating tissue in an attempt to get that rest.

In France, we find a different principle enunciated by Lucas Champonière in 1880. He went to the extreme in the relationship of bone and muscle and advocated passive motion, massage and active motion, as soon as they could be instituted.

While there are these two opposite viewpoints the advocacy of rest, by Dr. Orr of Lincoln, enunciates a fundamental principle in development and repair and the close association between the two. In the adult, in repair, we have practically a repetition of the same processes that occur in the embryo in the formation of the tissues.

During the repair period pressure is brought to bear upon the cells, the pressure of differential growth.

With an infected fracture, there must be proliferation of cells to bridge the breach that has occurred, and the infection must be fought at the same time. When the infection has been subdued there must be continued proliferation of cells, growth, repair or regeneration before function is brought to bear upon the broken or infected bone.

Dr. Orr advocates rest and allows during that time adequate proliferation of the cells and subduing of the infection before the specific function of muscular activity is brought to bear upon the bone. However, after that breach has been filled, due to the intitial process of growth, then the maintenance of that tissue subsequent to the inhibition or cessation of the growth means specific function by muscle exercise.

In order to maintain the bone structure functional muscular activity must be brought to bear: the back-pressure vectors of muscle action.

I would like to ask Dr. Orr in the cases he presented; when does he institute motion?

DR. JOSEPH SMITH, (Wausau): I have nothing

to add to the principles that Dr. Orr has enunciated. I have heard him talk about this a number of times and thoroughly agree with the principle of treatment he has laid down. But there is a practical aspect that I want to bring to your attention at this time. This subject is being presented to a group of men, many of whom are not doing a large amount of bone surgery, and perhaps presented with the idea that it is a method that should be tried.

Not long ago there was tried in one of the courts of Wisconsin a case in which a surgeon put on a plaster cast in a case of osteomyelitis, and the evidence showed this cast was left on for something like six weeks, until the pus ran out from under the cast. The patient's father brought suit against the doctor, and the evidence showed what was held to be neglect on the part of the doctor. At least it was so construed by the courts and jury, and a verdict of $10,000 was returned against that doctor. The verdict was afterward reversed by the State Supreme Court.

Now I am afraid if we go out and start practicing Dr. Orr's method in a general way some of us are going to run into that same thing. The public, the Industrial Commissions, and the courts are not educated to that point as yet. I am wondering whether putting these cases into a plaster cast and leaving them for a month or two is absolutely necessary or whether that is, at least in part, a theoretical consideration.

This is the thing I want to ask Dr. Orr and Dr. Gaenslen. I am talking about the isolated case in the hands of the man who is not doing very much of this work. Faced by the fact there is this decision in the courts, I wonder if it would be a crime to cut a window in these casts, and just remove some of the outside dressings, to see whether the pus is running out through the outside dressings, in order to satisfy the requirements of what seems to be the popular idea about the treatment of fractures.

DR. F. J. GAENSLEN, (Milwaukee): Inasmuch as Dr. Smith has asked me a question, I will be glad to reply to it. I would not say it is a crime to put a window in a cast to inspect a wound, but I would say it was entirely unnecessary and objectionable. I believe in watching the patient in the hospital for a few days. His temperature, pulse, general appearance and his statements as to how he feels are sufficient guides to know whether or not that case is progressing well.

I grant there are some cases where adequate surgery is impossible, e. g. osteomyelitis of the ilium in or about the acetabulum, of the vertebrae, etc. Here the osteomyelitis is inaccessible. These cases will have to be treated as heretofore.

I feel it is objectionable to put a window in the cast because you alter the relations of pressure in wound healing, and I believe that pressure in wound healing is a very important factor that we know very little about.

The superficial cells in a granulating wound are under handicap, because they have not on all sides the normal or optimum of pressure necessary to normal cell physiology. This means that the processes of reproduction, growth, repair and defense against infection are hindered.

I believe that the vaseline dressing comes as near to providing the optimum of pressure, as concerned in the wound healing, as it is possible for us to give, and, therefore, I feel that the wound should be disturbed as little as possible, avoiding frequent dressings.

The question of malpractice suits for apparent neglect because of infrequent dressings and odor from the wound deserves consideration. If you will watch your patient carefully you need not fear legal complications. If a case is inoperable, i. e. if the lesion of osteomyelitis is inaccessible, then the Orr treatment is not indicated. In such cases any of the usual methods will serve the purpose. If the operation is adequate also drainage and immobilization, as stipulated by Dr. Orr, then the progress will be satisfactory and legal complications will obviously be out of the question. (Applause).

DR. ORR: Before Dr. Smith's remarks get cold I should like to reply to them right away.

The method of treating these patients by a "let alone" policy does, in a manner, give the impression that the patient is being neglected. At any rate, dressings, daily or oftener, which are commonly expected in these cases are not being done. The case which Dr. Smith reports, however, is the first I have heard of where suit was brought on the basis of neglect of a case for that reason.

As Dr. Smith has suggested, the popular demand is for a lot of attention for these cases but let me state this thing the other way around. Suppose I have a compound fracture with a lot of foreign material in it; my method of treatment is to do a debridement, put on a dressing, then apply a cast and let it alone. If, on the other hand, such a cast is applied, a window is made and dressings are begun, our experience is about this—there is a dressing the first day, the second day, the third day, etc., sometimes twice a day and about the second to the tenth day the patient develops a septicemia. It is customary to blame the septicemia on the fracture. Our experience leads us to think, however, that in many cases septicemia is due to secondary infection at the time of the dressings or to disturbance of the wound surface and of the fracture area. I think the time will come when it will be understood that secondary infectious complications and septicemia are much more likely to be due to ill-advised dressings than to the kind of neglect that seems to be implied in letting the wound area alone.

It is our impression that about nine times out of ten it is safer to treat a compound fracture by clean operation, by covering it with a sterile dressing and letting it alone than it is to meddle with it daily or oftener until the patient develops a complication. That is my point with regard to this method.

In the case of an acute osteomyelitis, this method that I have described appears to be a much safer method. Certainly with reference to the compound fracture patient or the chronic osteomyelitic patient, the average of daily dressings shows that they do harm rather than good. Of course it might happen that a patient with an acute osteomyelitis or a compond fracture might have such a severe injury or such a severe infection at the very beginning that no amount of surgery could relieve him. We have seen such patients die within twenty-four or forty-eight hours in spite of anything we could do, of course. After five years of personal experience with this

method, however, and in the hands of many other surgeons throughout the country, this is the first case in which the method or any method resembling mine was reported to have been followed by such severe results.

DR. SMITH: He had a long sickness and a high degree of permanent disability.

DR. ORR: The consequences described in this case may have been due to the failure to get a good result from the treatment of the fracture apart from the infection, or of course, the infection may have been of such a character that the treatment was not applicable in this case. I sincerely believe, however, and I believe those especially experienced in this method will bear me out that seven or eight times out of ten the method I have described is safer in the hands of the average surgeon than any method of daily irrigations, packs, and wet dressings and daily disturbance and reinfection.

Please allow me to thank the members of the Association very much for the interest shown in this discussion. I enjoyed particularly the discussion of the history of rest. The contributions of John Hunter, John Hilton, Hugh Owen Thomas and others to this general topic are of the greatest importance; I think we should all do well to go back to the original writings of these men and particularly to the writings of Lister to clear up our ideas in regard to matters about which we have known but which, to some extent, we have forgotten.

The Normal and Abnormal Origin, Growth and Repair of Bone*

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There is no problem that has occupied the attention of clinicians over so long a period of time as the origin of bone, either in the case of repair following fractures; in the abnormal type of bone origin, myositis ossificans or the normal embryonic bone origin.

In order to understand clearly our present concept as regards bone formation, it is necessary to briefly review the history of the development of our ideas. Lemnius 1581 first observed that madder stains growing bone red. It was not until Belchier, an English surgeon, in 1736 re-discovered that madder-dye was taken up by newly formed bone that any advance was made. However, Belchier himself did not contribute to any advance except the fact that newly formed bone would absorb madder. It remained for a non-medical man by the name of Duhamel (1742) to apply Belchier's observations to newly formed bone and find that bone did grow in length at the juncture between the epiphysis and diaphysis, and in diameter, subperiosteally. With those observations Duhamel came to the conclusion that bone was primarily a product of periosteum.

A Swiss by the name of Haller 1744, a great physiologist of the time, and whose authority held sway, was diametrically opposed to Duhamel's views. Haller contended that periosteum did not contribute to the formation of bone but bone was a product of blood vessels. John Hunter (1764) an English anatomist-surgeon took up the Hallerian views and was convinced, bone was a product of the blood vessels. because of the observation of the newly formed antlers shed by the deer. He said that there was a basis of capillaries underlying the formation of the antlers, and came to the conclusion that bone was a product or secretion from the blood vessels.

Up to this time, all of the observations primarily were gross observations. The microscope had not been definitely introduced to the problems of the cell. It was not until 1828-29 that there was put forth the theory that animals and plants were composed of cells by Schleiden and Schwann respectively. A Scotch professor of anatomy, John Goodsir 1853 at the University of Edinburgh discovered with the aid of a microscope that there were, underlying the periosteum, minute cells which he called bone formers. Gegenbauer (1864) introduced the term, osteoblast, whereas, Kölliker (1873) introduced the term, osteoclast. The term osteoblast was an unfortunate term due to the fact that it has given the idea that bone formation is independent regardless of the environments in which the cells are placed. As a consequence, the idea came into existence that bone could only originate from those cells underlying the periosteum, and primarily confined within the periosteum, which meant the cells derived the right somewhere back in the germ-plasm to form bone regardless of the environment in which those cells were found.

Later we find that Macewen (1912) from observations, to a large extent, looked upon the periosteum as being purely a limiting membrane. The outer fibro-elastic covering held within, the cells, that were endowed with capacity to form bone.

Based on particular ideas of bone origin we find that the treatment of fractures to a large extent,

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has been determined. Certain groups have advocated absolute rest over a long period of time, as for instance, John Hilton (1853) of London and Hugh Thomas (1886) orthopedic surgeon of Liverpool. We find, however, in France a different and diametrically opposed orthopedic treatment advocated namely, massage, passive and active measures introduced by Just, Lucas-Championnière in 1881.

The reparative processes that occur in the adult in tissue formation are nothing more than a repetition of processes that occur in the embryo. The processes that occur in the embryo in the formation of the primary and secondary bone are due to pressure; the pressure of differential growth and back-pressure of muscle function. Early in growth the dominant factor of pressure in the formation of bone will be the factor of differential growth.

We have in the central core of the skeleton a rapidly dividing group of cells. Robertson, the chemist, now in Australia, stated the rapid division of cells was due to a catalyst, and this catalyst sometimes stimulated cells to rapid division when crowded together. He called this the allelocatalytic effect. These cells, close together, and rapidly dividing, stretch a surrounding group of cells that form the perichondrium or the periosteum, which results in two systems of pressure. The centrifugal pressure, either in length or diameter, is due to the growth of the cells themselves that form the skeleton. The reactive centripetal effect is due to what has been called by Macewen (1912) the perichondrium or periosteum, the limiting membrane.

As we follow the development of bone from its original form up to the time of its consummation and maturity, we find after the growth processes have ceased the factors that tend to maintain bone will be back-pressure of muscle pull, function.

I remember very well in the clinics that I attended under my master, Dr. Dean Lewis, that he emphasized very definitely the factor of early mobilization after a certain period of repair had taken place. That, to a large extent, will vary, depending upon the bone in the body that happens to be fractured and the extent of the injury.

In order to give you a concept as regards the early stages of bone formation, I would like to review the development of the femur, both in the primary diaphyseal location and the secondary epiphyseal one.

. . . . Twenty-two slides of "Bone Origin, Repair, and Structure" were demonstrated.

CONCLUSIONS

The conclusions from the evidence presented follows:

1. The architecture of mature cancellous bone at monaxial, biaxial and triaxial joints is determined by the back-pressure vectors of muscle action in joint range of mobilization and not the static load of body weight.

2. During development there is a pressure of differential growth that results in so-called vegetative bone formation in addition to that of muscle action. The origin of bone is a stiffening process of confined and richly vascularized mesenchymal cells enclosed by a circumscribed membrane and involves the accelerated proliferation of cells growing centrifugally in a relatively small volume against a limiting, extrinsic centripetal resistance. The interaction of the centrifugal and centripetal factors of differential growth create intraembryonic environmental pressure. This is known as the allelocatalytic effect or the mutual acceleration of the growth of cells dividing in a relatively small volume by the catalyst of growth. The failure to produce bone by tissue culture 'in vitro' is due to the fact that the pressure of structural organization has been eliminated and because of the fact that the so called osteoblast has been regarded as a self-differentiated cell capable of forming bone regardless of its environment. Bone produced by differential growth, such as myositis ossificans usually undergoes atrophy when energy of repair is equalized, if no functional pressure be brought to bear upon the bone.

3. Selective focal atrophy of cancellous bone groups in the adult dog may be accomplished experimentally by the local surgical excision of the muscle whose back-pressure vectors resulted in the structural expression of specific groups of cancellous trabeculae.

4. During the prenatal development of the femur in the fetal cow there is a relative shortening of the femur 6-fold in relation to thigh muscle weight from the 32.5 cm. to 90 cm. stage as well as decrease in femoral volume relative to femoral weight. The femoral weight and density increases in direct proportion to the thigh muscle weight. The femur is apparently hammered relatively shorter and more consolidated during the prenatal period by growth resistances, especially the back-pressure of the developing tonic thigh musculature. The mature skeleton is a pressure-meter of muscle pull.

5. The calcar femorale or femoral spur, in the neck of the human femur, is the objective expression of the confluent back-pressure vectors which are the resultant of the actions, primarily, of the extensor gluteus maximus and flexor ilio-psoas muscles of the hip in sustaining body weight in the erect posture.

6. The normal growth and mature structure of cancellous bone is the result of a dynamic muscular activity and the intrinsic capacity of skeletal cells to proliferate centrifugally against extrinsic centripetal resistances. The normal skeleton and related musculature are reciprocally dependent and mutually interactive in origin, growth and mature structural maintenance. The adequately nourished and functional skin, nerves, muscles, tendons, bones and joints form a functional unit for motion and maintenance of muscle tonus and a solid skeletal base.

7. The value of rest as a therapeutic agent following fractures is variable for each bone in the body and is denpendent on the extent of injury. Rest is primarily of value during the reparative period of proliferation following injury. The stimulus of trauma supplies the cellular bricks that weld the gap of the fracture. The subsequent value of motion, after the vascularized cells have adequately filled the breach, is the adequate conduction of back-pressure vectors that accelerate the transformation of the vascularized cells into bone and prevents excessive callous formation. The time for motion and its execution are under strict guidance of the clinician.

8. The osteoblast, is a dependent cell that acquires its morpholigical attributes by the position it occupies in the developing embryo or zone of repair in the adult: it is a reaction cell adequately nourished and consolidated by the stimulus of compression of structural organization during the period of differential growth and functional mature maintenance. The site of active secretion of calcium salts by the cells called osteoblasts is the location of an environmental adaptation by young growing or repairing vascularized cells to the back-pressure vectors stimuli of differential growth and muscle function.

9. I wish to emphasize, in closing, that there is a time for rest and a time for motion in the treatment of fractures, whether they be simple or whether they be infected compound fractures. During the initial primary proliferative stage of repair, "Rest" is indicated. After an adequate amount of tissue has been supplied to bridge the gap or weld the breach of the fracture in the bone the functional pressure of the musculature must be brought upon it in order to maintain it in a healthy normal condition of consolidation.

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DISCUSSION

DR. WALTER SULLIVAN (Madison): I am sure that you have all seen and admired the beautiful demonstration that Dr. Carey has downstairs. I have listened to discussions of his work for several years with the greatest admiration for his enthusiasm. In general I can say that I agree with a great many points that he has emphasized. These I need not review. I would like to point out one or two things that I think would bear further discussion.

There probably is, as Dr. Carey has indicated, nothing that has created more interest than the discussion of bone and its repair processes. At most of the anatomical meetings there is a discussion of bone. The same is true of your State Medical meetings. One of the most interest-

ing series of articles of which I know is by Keith in the British Journal of Surgery where he reviews the study of bone.

I think we can say that a good many things come down to a question of definition. Dr. Carey has mentioned Macewen, who has been vigorously attacked and strongly defended. Really if you agree on what you mean by the periosteum there is no further question as to what Mcewen is talking about and I think that most anatomists will agree with him. It happens that different people have different conceptions of what constitutes the periosteum and that applies especially to what a great many of us call the deepest layer of the periosteum. Some call it the cambium and some call it the osteogenetic layer. If you will first agree whether this layer is a part of the periosteum or a part of the bone there is no further chance for an argument about what Macewen is discussing.

I think it is too bad when we have done a piece of work we often feel that we must draw general conclusions. I would like to use one or two illustrations.

Dr. Carey has done a beautiful piece of work having in mind muscle pull, pressure, tensions, strain and what not and I can listen to a presentation of his work with enthusiasm. Dr. Sinclair who has been working with us for the past year or two will describe just as enthusiastically the bone pattern in relation to the vascular plan. Probably somewhere in between or on both sides lies the story.

I think when we are talking about muscle action we are not just talking about stress and strain and pressure. I believe in most of Dr. Carey's experiments he would agree that he has changed the whole metabolic situation. While I agree with him in what he says about pressure and strain I think there is still that whole metabolic story to be taken into consideration when we discuss bone.

Another case in point is the work of Wieder of Pennsylvania. It is one of our best reports on bone repair. He made some saw cut wounds and during the process of repair found that a cartilaginous callus did not form. He drew up a series of conclusions as to why it did not occur. If he had done enough experiments he would have found that it does occur in a fair number of cases.

Then comes the question of bone architecture. Surely as we look at the human bone it appears, as Dr. Carey has expressed it here, that there is a series of forces at work and that the architectural design corresponds pretty closely to the pull and back pull of these different forces. On the other hand, I sat and listened for an hour or more to Dr. D'Arcy Thompson build up a theory that all natural architecture is based on the logarithmic spiral. I do not know that you can use the human bones as an example of this. Surely there is not much to suggest it. However, if we examine the bones of birds there is a suggestion that we are dealing with what is fundamentally a spiral type of architecture modified perhaps by immediately applied forces. This I know is just a suggestion but there is a difference of opinion as to what is at the basis of the fundamental architecture of bone. Surely we know that we can modify bone the way Dr. Carey has expressed it here.

There is another point that I would like to take up and I hope that you will keep in mind what I said in the beginning, that I believe that there is no point in discussing the things on which we agree. It will be best to consider points on which we differ.

Dr. Carey has a statement in his outline that relatively fixed joints have no epiphyses. That I think is perhaps misleading. It would imply, in the converse, that mobile joints always have epiphyses. In dealing with a selected group of mammals possibly either of these statements will hold. If we deal with the wider group of animals they do not hold.

In regard to the fixed joints we probably would agree that there are few joints in the body more fixed than those between the vertebrae that go to make up the sacrum. These are relatively fixed, immobile joints. Just the past week in running through a study of the skeleton of the sea lion we found perfectly good epiphyses in these vertebrae just the same as in other parts of the body. I think epiphyses are still a wide open question. As we run through the animal series we get all kinds of isolated conditions.

In regard to the question of rest for fractured bones I think that what Dr. Carey has said represents the general opinion. I think some of us will recall that three or four years ago one of the roentgenologists, from one of the Milwaukee hospitals I believe, was speaking on the early use of fractured parts. He was showing some x-rays. Some of them did not look very good and he pointed out that good apposition and good alignment were not necessary. Not being sure that he had made his point he went on to say that they were not even desirable. I think it was the following year that Dr. Yates cleared up the situation. I do not remember his exact statement but it was much as Dr. Carey put it today.

I would like again to express my appreciation of the exhibit that Dr. Carey has downstairs and of his asking me to discuss his paper.

DR. CAREY: There is only one thing, the idea which I would like to dispel, and that is that I have any particular notion that bone is purely due to mechanical factors. There are biochemical factors, to be sure, the general metabolism of the organism, controlled by the various endocrin glands, the pituitary, thyroid, parathyroid, or adrenalin. What that particular relationship is we do not know. It is a complex one.

I dealt with purely one aspect of the problem and do not wish to give the impression that the whole story had been told, when we speak about the external and internal architecture being laid down in a mold of musculature. I believe the experiments are under enough control that whatever factors would have been altered, both in the bone and musculature, would have been altered at the same time.

In connection with the point Dr. Sullivan brings out of Dr. Sinclair's work at Madison stating that bone is laid down around a vascular pattern, I can very well agree for he is only looking at the vascular aspects of the same problem. There is a chemical aspect. Through the ingrowth of these groups of blood vessels in the bone they will form various patterns, to be sure, but these patterns are not self-sustaining patterns.

I think, to a large extent, where great confusion has been brought into the problem of bone is not differentiating between the fact that early there is pressure of differential growth due to the fibrous perichondrium or membrane and that whatever expansional growth due to the proliferation of cells is taking place, it is an interacting system, and any particular blood vessels flowing into that system are bound to be affected as regards the course they pursue.

When it comes to the proposition of bone, I merely want to leave this one viewpoint, and that is there is a specific mechanical factor. There is likewise a specific chemical factor, and all of these factors converge to the produced the configuration not only the external form but the internal structure of bone, and any alteration in any of the parts is bound to affect the whole. The parts for motion are mutually dependent.

As we look upon bone, it is laid down in an interacting mold. That mold, to a large extent, is determined by the mechanics in the location, but the content that is poured into that mold will depend upon the blood content, chemical messengers and the muscular irritability and many other factors. We are not dealing with a simple problem. We are dealing with a complex resultant, bone, and must take one aspect at a time, and I have taken the dynamic or mechanical one. (Applause).

Foreign Bodies in the Oesophagus and Upper Air Passages*

By J. J. ROBB, M. D.
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My object in presenting this paper on bronchoscopy is not with the idea that I am adding anything to the literature on this subject, but to endeavor to disseminate a more general knowledge of the possibilities of bronchoscopy and oesophagoscopy. I believe that the ease with which a direct inspection of the tracheo-bronchial tree and of the oesophagus can be made is not generally appreciated. When I say it is not generally appreciated, I am referring, of course, to the general surgeons and internists practicing in communities at some distance from the larger cities. I question whether many of the men practicing in the very large cities properly appreciate what can be done by this method to aid in diagnosis and in treatment. I am sure of one thing and that is that many men practicing in our smaller centers do not realize the value of bronchoscopy. Many of them have had cases and did not know where to send them and probably hesitated because of the expense to send them the long distances to the larger medical centers. Another thing that may not be as well understood as it should be is how easily the mucous membrane of the oesophagus, for example, can be perforated leading to infection and death of the patient. Many of the foreign bodies involuntarily swallowed or partially swallowed have rough or sharp edges and any blind efforts at removal can do very great harm. Also the forcing of a stomach tube, bougie or old-fashioned probang through an already injured oesophagus cannot be considered a good surgical procedure.

By using the bronchoscope the instrument can be passed down to the foreign body and the sharp edge or point grasped with forceps and pulled up into the tube and thus removed without injury. This applies to open safety pins as well as any other kind of pin. The open safety pin can be closed in situ and removed without damage. If it cannot be closed and point is up and point cannot be pulled up into the bronchoscope, it is better to pass it on into the stomach and then recover it with gastrotomy.

Foreign bodies inhaled should not be left in situ in the hope that they will be coughed up at some future time. Most of these objects produce considerable inflammation with subsequent swelling, which precludes that possibility, to say nothing of the danger of infection with possible lung abscess. I am not going into the history of bronchoscopy except to state that as early as 1807, Bozun, according to Chevalier Jackson's textbook, examined the upper end of the oesophagus. In 1828, Horace Green conceived the idea of medicating the larynx and trachea, through catheters. He reported his work to the Medical and Surgical Society of New York in 1847, and was asked to withdraw from the society as a consequence. In 1885, Joseph O'Dwyer perfected his intubation tubes for relief of stenosis of the larynx. From this time on, many operators using different instruments reported successful examinations of the trachea, bronchi, and of the oesophagus. It was not until the early 1900's that the first successful removal of foreign bodies from the oesophagus, larynx and trachea were reported. It is Jackson who deserves the credit for the remarkable advance made in this branch of medicine during the past few years.

The bronchoscope can be used not only for removal of foreign bodies swallowed or inhaled, but is invaluable as an aid to diagnosis and treatment. Used in conjunction with the x-ray and fluoroscope, strictures of the oesophagus can be studied

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and definite data obtained to establish the true cause. Whether there is a diverticula present is not hard to demonstrate. Whether the stricture is due to a malignancy involving the oesophagus to contraction of scar tissue following the swallowing of irritating substances or is caused by some condition in the mediastinum causing pressure on the oesophagus can usually be shown. When the stricture is due to scar tissue, methods of dilatation can be employed through the bronchoscope. In the larynx, this method offers the ideal procedure both to establish a diagnosis and to apply treatment. For example, in tubercular involvement of the larynx including the epiglottis, we all know how difficult if not impossible it is to get a good view of all the tissues in the larynx by indirect examination. When the epiglottis is deformed, the vocal cords or other parts of the larynx below the epiglottis cannot be seen by the indirect method. In applying treatment to the structures of the larynx or epiglottis we know how difficult it is by the indirect method to confine our astringent to the ulcerated area. By using the bronchoscope and thorough cocainization, the medication can be confined exclusively to the parts involved and the surrounding structures already devitalized by the tuberculous process are not impaired by inadvertent application of silver nitrate, zinc chloride or other agent.

CASE REPORTS

The following cases will suffice to show somewhat the variety of foreign bodies encountered and the comments with each case will emphasize the difficulties of diagnosis and removal.

Case No. 1. This child, about five years of age, was brought to the hospital with a history of inhaling a piece of carrot. The child was eating a raw carrot and suddenly had a choking spell. His breathing was markedly obstructed and the child was quite cyanotic. The x-ray was of no value in this case and as there was apparently no doubt of the presence of some obstruction to the breathing the bronchoscope was passed and the piece of carrot shown was found just below the vocal cords.

Case No. 2. This two-year-old child began crying while eating peanuts and had a choking spell. After the first severe spasm of coughing had ended the child did not appear to be in any distress, except for occasional spasms of coughing. The parents were sure from the coughing and difficulty in breathing that the child had some of the peanut in its trachea or lung. The x-ray did not reveal anything definite. The bronchoscope was passed and about one-quarter of a peanut was found just beyond the bifurcation in the right bronchus.

Case No. 3. This child, two years of age, had been slapped by her mother while eating peanuts and had had a spasm of coughing. The mother telephoned describing the occurrence and the family physician was called in a few hours later. There was no interference with breathing. There was no temperature and the stethoscope revealed nothing to indicate the presence of any foreign body, so the mother was told to report if anything developed. Nothing further was heard from her for two weeks, when the mother reported that the child was having occasional paroxysms of coughing, especially at night, and was somewhat restless in her sleep. An x-ray was taken at this time, but although it showed an area somewhat opaque, it could not be stated positively that there was a foreign body present. It was concluded that an examination with the bronchoscope was indicated. The portion of peanut was found in the same location as case two, just beyond the bifurcation in the right bronchus.

Case No. 4. This little sixteen months old girl, a Doctor's child, was playing with a box of buttons and suddenly developed a spasm of choking. Her mother suspected that she had swallowed one of the buttons, but as they were not large, was not unduly alarmed, and after the first spasm the baby seemed to be quite all right. Afterwards, she seemed to have some difficulty in swallowing food and vomited several times after taking solids. X-rays were taken but revealed nothing. It developed that she could not swallow any solid food but drank plenty of liquids. After sometime, the child's father consulted other physicians and a stomach tube was passed and it was assumed there was nothing in the oesophagus. The child was now running some temperature, and was rather restless while asleep. She drank plenty of milk, but no solids. The father felt there was something obstructing the oesophagus. More x-rays revealed nothing, but it was thought advisable to make an examination with the bronchoscope, and the button shown was found lying flat across the oesophagus just below the level of the clavicle. The structure of the button shows why it did not show in the x-ray plate.

Case No. 5. This little two years and four months old girl, while playing by herself suddenly began to choke. The seizure lasted only a few seconds and then the child apparently was all right. The parents examined her playthings and could not find a bolt which they knew had been among them. The child coughed at intervals—a dry raspy cough and breathed with slight difficulty—and the family physician was called in. There evidently was not sufficient disturbance to warrant his suggesting an x-ray at that time, and he probably thought the parents had been mistaken about her swallowing anything. Six days later the doctor advised them to have a plate taken. During this interval, the child had not complained, but did not eat heartily, and was rather listless and not inclined to play. Her rest at night was disturbed by paroxysms of coughing. On the sixth day, the patient had a temperature of 102.7, and the following day an x-ray plate revealed the foreign body in the lung.

Examination on entrance to the hospital showed a well-nourished child of two years and four months, breathing with slight or no difficulty. Temperature 100; pulse 100. She coughed at intervals, a dry and raspy cough, but otherwise showed no symptoms.

The foreign body was a bolt one and five-eights inches in length with a head one-quarter inch in diameter. The body was one-eighth of an inch in diameter, the same size all the way and with a thread for attaching the nut.

It was removed with some difficulty through the bronchoscope on account of its size. It almost filled the small tube of the bronchoscope, which had to be used making it difficult to grasp it.

The child was allowed to go home in six days showing no evidence of being any the worse for her experience. The lungs were entirely normal so far as could be determined by physical examination. The case is interesting because of the unusual size of the foreign body, and the small amount of constitutional disturbance occasioned by its presence in the lung.

Case No. 6. Tin whistle in oesophagus; nothing special except that could only be removed by getting hook into hole. The forceps continually slipped off.

Case No. 7. This young adult was a prisoner at the State Reformatory. It was thought by the attending physicians and attendants at the institution that this pin was swallowed intentionally and subsequent happenings bore out this assumption. On the first attempt at removal the pin became dislodged and passed down into the stomach. An x-ray revealed it present in the stomach. He was taken back to the reformatory and the following day a fluoroscopic search for the pin was made and it was found in identically the same position in the oesophagus only a little higher up. In both cases, the pin was open and the point up. It was removed by grasping the point and pulling it up into the tube. The patient subsequently admitted that the pin had passed by rectum and he swallowed it the second time.

Case No. 8. This man while eating swallowed a piece of partially chewed meat which lodged in the oesophagus. An attempt had been made by the physician referring him to dislodge it by use of the stomach tube or other means. He was suffering acutely and his conjunctiva was much inflamed from retching and former attempts at relief. The meat was encountered about on a level with the fourth rib and before it could be grasped with forceps it became dislodged and passed into the stomach with immediate relief.

Case No. 9. This boy, twelve years of age, while pretending to be a magician, opened his mouth wide and tossed a fifty cent piece into it, and immediately swallowed it. It lodged about half way down the oesophagus. Unfortunately this was so firmly fixed that it slipped off the forceps, and passed down into the stomach. Some days later the stomach had to be opened, and the coin removed.

Case No. 10. This little girl, six years of age, had a perfectly round shoe button deeply embedded in one of the left bronchi. On the first attempt, I was unable to grasp button, so we gave her two days rest, and on the second attempt had the same difficulty getting a grasp on the round button. After numerous attempts it was finally pulled up as far as the vocal cords, when it slipped off and dropped back into the lung, and the child stopped breathing and died on the table. I was using chloroform anaesthesia, but she was beginning to come

out of the anaesthetic when the accident happened. I have no satisfactory explanation of why this fatal collapse occurred, but am inclined to believe that the attempt had been too prolonged. This occurred early in this series and from this experience, and the experiences of others, I think very short intervals of instrumentation only should be attempted.

Case No. 11. This case was a girl of five years and eleven months, who gave a history of gradually increasing difficulty in breathing. Her appearance and breathing indicated an obstruction somewhere, most probably in the larynx. An attempt was made to examine her larynx by the indirect method. She had passed through other hands previous to coming to the hospital and she was very apprehensive, and it was impossible to get a view of her larynx. She was kept under observation for a few days with frequent attempts at examination. Her breathing became so labored and her condition so bad, that something had to be done at once to relieve her. A high tracheotomy was done under local anaesthetic and completely relieved her difficulty in breathing. After a few days rest and improvement in her general condition, she was given $CHCl_3$ and her larynx examined with the bronchoscope. It showed multiple sessile growths involving the whole larynx above the vocal cords. A piece was removed and examined under the microscope, confirming the clinical diagnosis of papilloma. I started treating it by fulguration through the bronchoscope. It was fulgurated every week under $CHCl_3$ anaesthesia. She contracted scarlet fever, and we had to give it up for a long period. At one time her breathing was so much improved that the tracheotomy tube was removed and the wound allowed to heal. At the end of the next fulguration, when the bronchoscope was removed, she was unable to get any air through her larynx, and an emergency tracheotomy had to be done. Fortunately, the instruments had been prepared before the fulguration and a stab wound was made thru the scar tissue and the tracheotomy tube replaced. These fulgurations extended over more than two years with fairly long intervals during which she was allowed to go home. She attended school and learned to drop her chin over the tracheotomy tube in order to talk. She returned some months later, and examination by indirect method showed entire absence of any growth, and the tube was removed. A plastic operation on the tracheotomy wound was necessary to close it. She has a good voice, except for a slight huskiness. The vocal cords are slightly thickened and there is a small amount of scar tissue above this.

Case No. 12. This case was a child of three years, who came into the hospital with a history of possible swallowing of a safety pin. The x-ray did not reveal a foreign body, but the child showed obstruction of his breathing. Under $CHCl_3$ anaesthesia the bronchoscope was passed well into the oesophagus and located nothing. On examining the larynx, it showed considerable membrane above the vocal cords and involving the pharynx in the neighborhood. A diagnosis of laryngeal diphtheria was made and antitoxin given. The child made a good recovery and left the hospital.

Case No. 13. Penny in Oesophagus.
Case No. 14. Nickel in Oesophagus.
Case No. 15. Quarter in Oesophagus.
Case No. 16. Penny in Oesophagus.
Case No. 17. Ring in Oesophagus.
Case No. 18. Pin (ordinary) in Trachea.
Case No. 19. Quarter in Oesophagus.
Case No. 20. Button with thread attached removed from oesophagus of a child two years old. This foreign body had been in the oesophagus two or three days without producing any symptoms except inability to swallow solids.

Case No. 21. This patient swallowed a piece of poorly chewed meat the previous day, and had been unable to swallow anything since. The bronchoscope was passed and a fairly large piece of meat removed. It was assumed that this piece was the one that was causing the obstruction, and the patient was returned to his room. The inability to swallow continued, and the following day, the instrument was again passed, and the piece shown in the photograph was removed with great difficulty. The trouble, of course, was that after getting a grasp with the forceps a part of this meat would break off leaving the large piece still in situ. An attempt was made to force it down into the stomach, but it could not be accomplished. After removing numerous pieces a good grasp was obtained, and the piece removed. An examination of the oesophagus after removal revealed a normal oesophagus. I had begun to suspect a possible malignancy. This meat was lodged about three to four inches above the entrance into the stomach.

Case No. 22. A boy, fourteen years of age, placed half of a lead sinker in his mouth, and inadvertently swallowed it. This sinker was one and one-half inches long and one-sixteenth of an inch thick, and one-half inch wide. It lodged about on a level with the fourth rib, and was removed without difficulty.

Spinal Anesthesia; Blood Pressure Control

By RICHARD B. STOUT, M. D.
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Prevention of the sudden fall in blood pressure incident to spinal anesthesia is preferable to treatment of the condition after its occurrence.

When the anesthetic solution diffuses upward in the dural canal to a level necessary for the performance of abdominal surgery, a large proportion of the white rami communicantes and their corresponding sympathetics are paralyzed, causing dilatation of the splanchnic vessels and a considerable fall in blood pressure.

The Trendelenburg position was first used to combat this fall in blood pressure and is still being

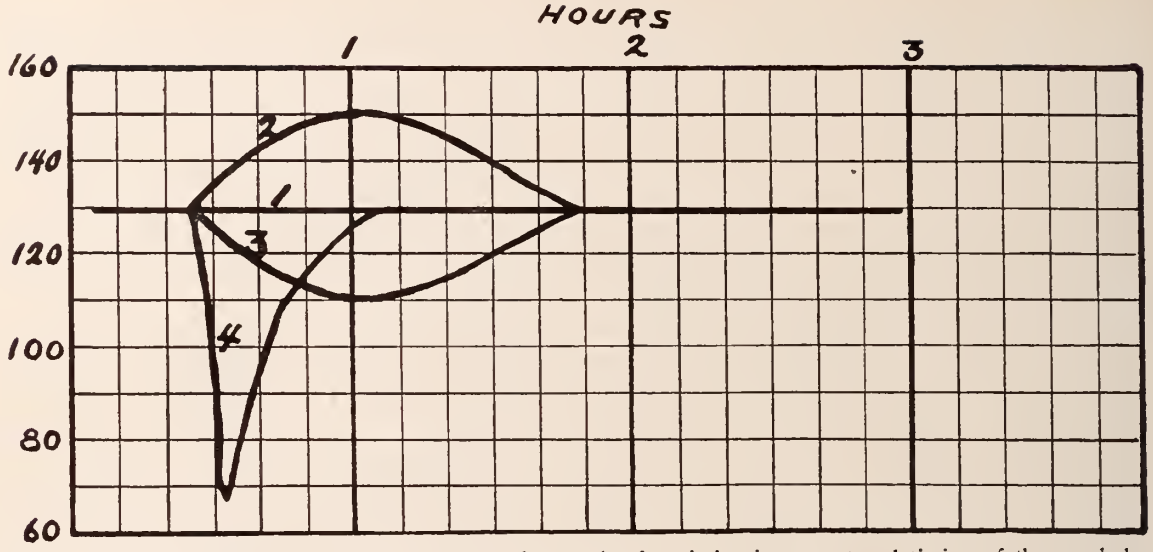

Figure 1. Average systolic blood pressure curves, the result of variation in amount and timing of the prophylactic dose of ephedrine.
Curve 1—Calculated dose of ephedrine given five minutes before intraspinal novocain.
Curve 2—Moderate over-dosage of ephedrine.
Curve 3—Moderate under-dosage of ephedrine. Blood pressure will finally resume normal level without stimulation. Nausea frequently occurs but may be relieved by two or three minims of adrenalin which quickly restores the blood pressure to its normal level.
Curve 4—Calculated dose of ephedrine given one minute after intraspinal novocain. Nausea and vomiting. Adrenalin stimulation necessary.
NOTE: Ephedrine dosage must be increased or augmented by small amounts of adrenalin in cases of hypertension with sclerosis or blood pressure drops similar to curve 4 will occur.

used routinely by some without other stimulation (1). This causes blood to gravitate to the brain and prevents cerebral anemia in spite of the general vascular relaxation, but allows stagnation in the dependent portions of the body and anemia in the uppermost. The Trendelenburg position in most instances will suffice to save the patient from death by cerebral anemia, but the occasional case of severe myocardial damage allows stagnation of blood to such an extent that emergency cardiovascular stimulation may become necessary. Adrenalin has been used for this purpose, but its action is so fleeting that repeated injections are necessary and the patient's vascular instability becomes a source of concern to the anesthetist.

A physiologically more rational procedure is the prophylactic administration of some peripherally acting vascular stimulant which will maintain a normal vascular tone over the entire body until the anesthesia wears off and the sympathetics regain control.

Ephedrine admirably fulfills the foregoing requirements. It was first used in spinal anesthesia by Ockerblad and Dillon in 1927 (2). They gave it by mouth, then hypodermically, after the blood pressure had fallen ten per cent of its original value. Its prophylactic use before induction of the spinal anesthesia was then tried with such favorable results that it has remained the method of choice.

If the anesthetic agent is diffused to such a level that all the sympathetics are paralyzed, a maximal fall in blood pressure will occur, while if only a portion of the sympathetics are paralyzed a proportionately less severe fall occurs. In the absence of any method to definitely control the height of anesthesia, when using novocain crystals dissolved in spinal fluid, the degree of the fall in blood pressure could not be predicted. A prophylactic dose of three fourths grain of ephredine is commonly used, supplemented by the Trendelenburg position, adrenalin or more ephedrine as the occasion seems to demand. This is a definite improvement over previous methods but nausea, vomiting, and minor variations in blood pressure continued to occur when the anesthetic extended higher than was expected.

With the evolution of Volume Control Technic (4) and the certainty of producing anesthesia to any definite level on the body as desired, it became possible to predict with a fair degree of accuracy the extent of the fall of the blood pressure to be expected. The prophylactic dosage of ephedrine was then varied in direct proportion to

the degree of vasodilatation expected. This has resulted in a much greater vascular stability during anesthesia with less nausea, vomiting and physical discomfort to the patient. Ephedrine dosage is also varied according to the size of the patient and his vascular status at the time. (For discussion see reference 3).

The proper timing of the prophylactic dose of ephedrine has also been found to be an important factor in maintenance of blood pressure as is illustrated by the accompanying graphic chart. If the spinal anesthesia is induced before absorption of the ephedrine has started, vascular tension is reduced to such a degree that absorption takes place slowly if at all, and stimulation by adrenalin becomes necessary. In such a case even adrenalin, when injected intramuscularly, is ineffective because of slow absorption unless the site of injection is thoroughly massaged.

Nausea, following a fall in blood pressure due to an insufficient prophylactic dose of ephedrine, may be relieved by the injection of 2 or 3 minims of adrenalin which quickly restores the blood pressure to its former level. Nausea, caused by too vigorous mesenteric traction, is usually accompanied by a slight fall in blood pressure which quickly regains its former level with cessation of the nausea when the traction is stopped. Stimulation by adrenalin in this case will raise the blood pressure but will not relieve the nauesa. Adequate incision and gentle handling obviate this difficulty. Psychic nausea is unaccompanied by a fall in blood pressure and may be prevented by avoiding the clatter of instruments, loud conversation, and noises which might disturb a conscious patient. Even the most apprehensive patient may be carried through a major operation without a qualm if sufficient pre-operative sedation has been given, or if the anesthetist will keep the patient's mind off the operation by means of an interesting conversation.

CONCLUSIONS

1. The properly timed prophylactic administration of ephedrine, in amounts directly proportional to the height of anesthesia to be produced, is a more desirable procedure than the administration of a uniform prophylactic dose, as it produces a condition of vascular stability during anesthesia which more nearly approximates the patient's normal than any method now in general use.

2. As a method of controlling the height of anesthesia must be used before variation of the prophylactic dose of ephedrine becomes feasible, Volume Control Technic, previously described, is recommended for consideration.

3. Three causes for nausea during operation under spinal anesthesia are differentiated and preventive measures suggested.

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THE JOURNAL CLINIC

Brain; Penetrating Wound with Recovery

By W. J. TUCKER, M. D.
Ashland

A penetrating bullet wound of the brain need not necessarily give a hopeless prognosis, as the following case exemplifies: Boy, age 14, shot with a .22 calibre rifle at a distance of 15 feet. Bullet entered skull in midline about 6 cm. above glabella.

Patient was rushed to hospital by special train arriving about two and one-half hours after the accident. Examination revealed that bullet entered skull through frontal bone in the midline about 6 cm. above glabella. X-ray of skull showed bullet lying impinged against the occipital bone within the cranial cavity about 3 cm. to right and 6 cm. above occipital protuberance. Particles of lead were distributed along the tract of bullet.

Owing to patient's condition, in marked shock reflexes absent, no surgical interference was possible or even considered. Following shock treatment, condition improved to the extent that a more complete examination was possible. There was evidence of a complete right hemiplegia. Spinal

fluid was not bloody nor under pressure. Retinal examination was negative. Blood pressure 110-80 and remained so with little variation at hourly intervals. Pulse 110-120 for two or three days. No signs of pressure warranting any interference.

Treatment consisted mainly of injections, hypodermically and intravenously, of hypotonic solutions of 50% magnesium sulphate, 3% sodium chloride and 50% glucose.

Patient gradually regained consciousness until the 8th day when temperature rose to 105, pulse fell to 80-70, blood pressure 160-100 and leukocytosis of 40,000 was found. We concluded that an intracranial abscess was developing and operation for the removal of the bullet with cerebral drainage was determined upon. We felt that sufficient time had elapsed to permit walling off of this abscess. Under local anesthesia, without moving patient from bed, a section of the occiptal bone was removed and bullet extracted with some difficulty. Following this, patient's condition became alarmingly worse—coma set in with respiratory changes, temperature 105 with vomiting, and it looked for two days as if the patient was going to die. Apparently the infective process had been stirred up by the manipulations. However, the use of hypertonic solutions was reinstated and patient gradually rallied. The period of convalescence was interrupted by an erysipelatous-like edema that developed about the anterior wound. This responded nicely to erysipelas vaccine and serum. Patient regained mental faculties entirely. The paralysis gradually improved first in the leg then in the flexor muscles of the arm. At the time of present report, nine months later, there has been slow improvement of motion in the muscles of forearm with practically full control of muscles of leg.

Interesting features are the results of use of hypertonic solutions to control the cerebral edema and the development of cerebral abscess with recovery. This case also demonstrates another point with reference to skull fractures, that intracranial pressure can be controlled by the use of hypertonic solutions and gives the surgeon an opportunity to choose a more advantageous time for operative intervention.

Liver; Subacute Yellow Atrophy Due to Cinchophen Poisoning; Report of a Case

By WALTER C. FRENZEL, M. D.
Wausau

Mr. B., aged 55, came to the office complaining of nervousness, jaundice and loss of voice. He had been suffering with rheumatoid arthritis for two months, and upon the advice of a friend purchased 100 7½ gr. tablets of cinchophen, which were taken at the rate of five to seven per day. After two days he developed a marked weakness, was disturbed emotionally, and gradually lost his voice so that he could only speak in a whisper. Jaundice followed the next few days, gradually deepening so that the skin was a deep orange color. No gastro-intestinal symptoms present.

Upon physical examination the chest and heart were found to be normal. The liver was barely palpable, but somewhat tender over the region of the gall bladder. There was a trace of bile in the urine. The stools and blood count were normal. Extensive observation and study of the gastro-intestinal tract with x-ray failed to reveal any pathology.

Under treatment the jaundice has gradually cleared up and at the end of three weeks the patient's voice is again normal and his self-control has returned.

Owing to the recent reports in medical literature, one is forced to draw the conclusion that cinchophen is a dangerous drug and poisoning is being more frequently recognized.

Society Committee On Storage Of X-Ray Films And Chemicals Reports

Appointed by President Doege, a committee of the State Society to aid the State Industrial Commission in determining safety standards for the storage of x-ray films and chemicals in hospitals and clinics made its preliminary report the last week in May. The committee report is only in the nature of memorandum bearing upon the subject; all rules and regulations will be made by the Commission.

The committee in its report suggested the importance of a single person in each institution charged with the enforcement of safety measures in the storage of films and chemicals. Other points made included the advisability of storing films in cardboard boxes of fifty each, rather than piling them on the shelves in their original paper envelopes; film boxes to be at least two feet from radiation of heat or lights; storage room to have special lock with keys in hands only of staff members; no other inflammable material in same storage room; drug room should not be located in close proximity to x-ray storage room; chloroform may cause phosgene gas in a fire; surplus supplies of ether, ethylene and oxygen not to be stored in same room; and further, than an active file of 1,000 x-ray films kept in a steel filing cabinet was not a source of potential danger as gas forming in a fire, except to one within the confines of the same small room.

TUBERCULOSIS and OTHER CHEST CONDITIONS

Tuberculosis Theses; Diagnostic

By LAWRASON BROWN, M. D.
Saranac Lake, N. Y.

1. An appearance of ruddy health does not exclude tuberculosis.
2. In any patient with constitutional symptoms, no matter of what he complains, the possibility of tuberculosis must be kept constantly in mind.
3. Prolonged and intimate exposure at any time of life, but especially in childhood, and in home or workshop or office, is vastly more important in diagnosis than "unassociated" or "non-contact" heredity.
4. Prolonged contact with tuberculosis may lead to infection, but debilitating conditions are usually necessary to cause this to develop into clinical tuberculosis.
5. Constitutional or general symptoms lead toward the diagnosis of tuberculosis, while the localizing symptoms point out the organs involved.
6. The history or presence of certain complications, as fistula in ano, pleurisy, adenitis, a discharging ear coming on painlessly, are all strongly suggestive of tuberculosis.
7. Pleurisy with effusion, not attributable to other causes, should be treated for a time as due to tuberculosis.
8. Loss of color, prolonged exposure to tuberculous infection, especially in childhood, with a history of swollen glands at that time, the more recent subjection to debilitating conditions, the presence of unequivocal constitutional and localizing symptoms, with or without the aforementioned complications, demand a diagnosis of pulmonary tuberculosis even though no abnormal physical signs are present in the lungs.
9. A diagnosis, tentative at least, must be made whenever an individual spits a dram or more of blood that cannot be proved to be due to other causes (e. g. mitral stenosis).
10. YOUR patients, YOUR friends, YOUR family are as prone to contract and develop pulmonary tuberculosis as hundreds of others.
11. Symptoms indicate that a patient is sick, while physical signs point out only the mischief that has been done.
12. Symptoms are a better and more accurate guide to activity than are physical signs.
13. Symptoms without physical signs demand treatment, while physical signs without symptoms require often only careful watching.
14. Slight but persistent rise in temperature and increase in rapidity of pulse are often present early in the disease.
15. The usual weight of a patient who develops pulmonary tuberculosis is often ten pounds below the normal weight for his height and age.
16. Failure to interpret rightly the significance of symptoms, to detect the presence of abnormal physical signs, can be condoned; but failure to ask for and to examine the sputum repeatedly in any patient with chronic cough is inexcusable.
17. Absence of tubercle bacilli in the sputum means only that bronchial ulceration has not occurred.
18. The importance of physical examination in the diagnosis of pulmonary tuberculosis has been overemphasized.
19. No single physical sign is pathognomonic of pulmonary tuberculosis.
20. Auscultation and inspection are the most important procedures in the detection of abnormal physical signs.

The "Diagnostic Theses" by Dr. Lawrason Brown first appeared in 1915. After 14 years these aphorisms are as valuable as ever and should be of definite assistance to every practitioner of medicine. The "Diagnostic Theses" will be concluded in the succeeding issue. (O. L.)

INCREASE ON INSTRUMENTS PROPOSED

If a bill that has passed the House of representatives is adopted in the U. S. Senate, local manufacturers of surgical instruments will be favored by an increase in the protective tariff from 45% to 70%. The bill passed the House on May 28th and the provision referring to the increase on surgical instruments is opposed by the American Medical Association.

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EDITORIALS

ADVANTAGES OF PRECEPTORSHIP

MERGING of the theoretical into the practical is the problem of medical education today. To distribute medical service equitably among those who need it is a proposition in which both physicians and laymen are interested.

How far physicians are losing the missionary spirit in the struggle that is forced upon them by high standards and a long and expensive course of training cannot, as yet, be estimated. Whether the commercial is supplanting the missionary spirit may be debatable but the fact remains that intensive technical instruction is diverting the present day graduates from rural locations to the larger medical centers where there are better facilities for cultural development, contact with leaders and where prospects for financial gain are more alluring.

It is a truth that no one will question that doctors cannot be too well prepared for the responsibilities of medical practice but it is a question whether or not modern methods of education are producing the highest grade of practitioners for the all around requirements of the people they will be called upon to serve.

The medical graduate, unless he be among those fortunate enough to secure a position in a clinic or association with someone with an established practice, must readjust himself to the needs of the people or communities he offers to serve. And his big problem during the first few years of practice is so to adjust himself and so apply the knowledge he has acquired as to establish himself in his chosen location, and give the service expected of him.

The University of Wisconsin, by its preceptorial plan, has taken a long step ahead in medical education. The three months the senior student spends with a preceptor and his group brings him into closer contact with actual conditions of practice than an interneship possibly can.

If he takes advantage of the opportunities offered he sees the emergencies and learns to meet them. He sees patients in their homes and under all kinds of conditions from poverty to wealth. He learns something of the problems of the home as they come under the observation of the physician and sees the many sides of the treatment of the sick in body and mind.

He acquires a degree of tolerance for the weaknesses of humanity and a broader conception of his mission, and learns that his is a profession and not a business. He learns the many sides to a doctor's life while ministering to the varied needs of suffering humanity, and finds that there is compensation for his service that cannot be measured by money though faithful and efficient service will bring adequate financial returns.

He is given a glimpse of the difficulties of reaching patients in remote sections; giving service in the presence of most adverse conditions and a realization of the joys of accomplishment.

The student with a receptive mind cannot help being greatly benefited by his experiences during his period with a preceptorial group, and the experiment of our university gives promise that it will be adopted generally as an essential in every medical college curriculum. How far it will go

toward solving the problem of adequate service to the rural communities remains to be seen but it is certainly a step in the right direction. *J. M. D.*

MALPRACTICE AND THE PRESS

A NEWSPAPER exists only because it furnishes news. As everyone knows, the unusual is always news and thus do we see, from time to time, bold headlines announcing that "Patient Sues Local Physician for $50,000." Sub-heads and the story elaborate on the charges of the patient which have just been filed in the local court. Of course, the answer of the physician will not be filed for many days and the case may not be tried for months, so the newspaper really presents but one side of the case but still it is, of course, news.

No one can justly blame a newspaper for printing news, but we sometimes wonder if the press really appreciates what it means in this specific instance. Skill, instruments and education are not a physician's capital, they are only the means of earning that capital which is really his reputation for care and a reasonable degree of success. The physician guards his reputation jealously in the operating room where he demands aseptic conditions, competent assistants, sponge and hemostat counts, and like precautions. He guards it in his every case by the care and attention that he gives. All this may be lost, however, at one stroke if a patient enters a suit for malpractice and the press publishes the allegations of the patient for the community to read.

The physician has not been convicted. Indeed, the malpractice case may be thrown out of court in its first half hour as has frequently occurred. But the confidence of the public and his patients may be forever shaken, if not lost. Even a case undertaken for the sake of charity may cost the physician an untold price.

If even fifty per cent of the malpractice cases were won, possibly we would have no grounds for this editorial. But when the figures indicate that only a very few cases have basis in fact and that the majority are based upon discontent, malice, misinformation or even the effort of the unscrupulous to prevent recovery of an amount due, the situation is much changed.

We wonder if there is not time enough for blasting a physician's reputation when malpractice has been proved? Is this not a subject that the officers of county medical societies might not discuss with local editors to a joint advantage and a better understanding? We think it is.

UNDULANT FEVER

THE medical dictionary states that Malta fever and undulant fever are synonymous terms. Malta fever has commonly existed in the region of the Mediterranean Sea and in occasional other endemic foci in various other parts of the world. In North America it has been known to occur along the Mexican border. The term "undulant" is descriptive of the wave-like exacerbations and declines in the temperature record of the disease. The studies of a British Commission on the Island of Malta showed the causative organism (Brucella melitensis) to exist in the milk of 10 to 15 per cent of goats.

About ten years ago bacteriologists discovered that Brucella melitensis and the organism causing contagious abortion in cattle had great similarity and that elaborate tests were required to tell them apart, and it was subsequently shown that there are several strains of Brucella melitensis, prominent among them being the porcine variety. With this advance in bacterial knowledge in mind medical men began to recognize that certain occasional obscure cases of disease had some connection with contagious abortion in cattle and of late many case reports are beginning to find their way into the medical journals.

During the latter part of last year the State Laboratory of Hygiene began the routine examination of blood tests sent in for typhoid and other reasons, and up to date more than twenty specimens have agglutinated in the titer, indicating probable undulant fever. According to present indications a considerable number of cases of undulant fever will eventually be found to occur in Wisconsin annually. Obscure fever, particularly of long standing and especially inclining to local intermittence or wave-like exacerbation and relapse, calls for a discriminative blood test. The history of the disease, so far, shows a large part of the patients have been in direct contact with livestock or engaged in the preparation of meat or are users of raw milk products. Pasteurization of milk and milk products kills the organism and therefore the annual distribution of cases is likely to be mainly in the small towns and rural districts.

The term "undulant fever" is now pretty generally applied in the literature to the form of disease originating from cattle and hogs. It would seem appropriate to restrict the term "Malta fever" to that form derived from goats.

AGAIN THE HIGH COST OF SICKNESS

RECENTLY the Chicago Medical Society has found it necessary to discipline one of its members for unethical conduct by expulsion from membership in the Society. The Council of the Illinois State Medical Society has more recently unanimously affirmed the action of the local Society.

The question involved, it appears, is one of unethical conduct and not a question of medical economics. The lay press in its comments on the case has quite generally failed to grasp the meaning of the principles of ethics involved, but has stressed the medical economics situation and has apparently seen fit to lay on the shoulders of the medical profession the blame for the increased cost of medical and hospital care.

The attention of the public should be called to the fact that, no matter how large the contributions made to medical charities by wealthy laymen, they are far outweighed by the services the members of the medical profession have contributed without cost to the care of the indigent sick. Much is said about the wealthy layman who contributes a million dollars to found a hospital, but very scant mention is made of the men who day by day and year after year contribute liberally of their time to the care of the patients in these institutions without financial remuneration.

It is also worthy of note that hospitals, almost without exception, are managed and controlled by *laymen,* the medical men connected with these institutions having, as a rule, little or nothing to say about their business management. If the public is paying too much for hospital medical care, it is therefore largely the fault of laymen themselves who sit upon the boards of these institutions.

Other factors contribute still more to the increased cost of medical care, such as the demand of patients of moderate means for private rooms, special nurses, etc., even when entering hospitals for ordinary and comparatively simple medical and surgical treatment. The wards of our so-called private hospitals are often found empty when all the private rooms in the institution are filled. Nurses on "private duty" are seen spending a large part of their time visiting with the patient or his friends or with each other. If some system of "group nursing" could be adopted, one nurse could easily care for three or four mildly sick persons instead of wasting a large part of her time, as is too often the case with the so-called "private duty" nurse.

These things and many more contribute far more to the increase in the cost of medical and surgical care than any increase in the cost of the medical man's services. Most of these factors are directly or indirectly in control of *laymen* who are largely themselves to blame for the very conditions about which they complain. *J. F. S.*

EXTENDING THE SERVICE LINE

WITH the development of "bigger and better" organizations in the industrial world of America, a great premium is being put on "executive capacity" of the managers of the enterprises. Roughly defined, executive capacity consists in the ability, on the part of its possessor, to forego doing anything he can get another to do approximately as well as he can himself.

The logical demands of—and our own pretentions in—the practise of modern medicine call for a larger exhibition of executive capacity on the part of its practitioners. Doctors must learn to do fewer things and direct more. Otherwise it is inconceivable that we shall ever catch up in the utilization of our present vast store of available knowledge.

It is many years since doctors transferred many of the functions incidental to the care of the sick to trained nurses. Many of the laboratory procedures are now done as well as, or better, by single-minded technicians. Many more transfers must be negotiated to free medical men of petty detail and to clear the paths for very important steps in case handling, now crowded out.

Cabot many years ago made a very clear case for "hospital social service" as an adjuvant of the conventional treatment given by doctors and sick room nurses. He carried much more conviction to nurses and social workers than to physicians who, presumably, should have been able to understand him better. The writer will send a carton of cigarettes to the reader who offers the best explanation of why practising physicians gave Cabot the icy stare. *H. E. D.*

TOO MUCH DOMINATION

ELSEWHERE in this issue, we are reprinting a splendid editorial from the January, 1929, number of the Pennsylvania Medical Journal. We commend it to our readers as a thoughtful, open-minded, and far-sighted view of the subject. Par-

ticularly sound, it seems to us is the suggestion that too much domination on the part of officialdom should not be encouraged by the medical profession.

Any scheme, furthermore, of securing the needed intelligent coordination, cooperation, and direction carries with it the liability of bureaucracy. However, bureaucracy, it must be understood in this connection, is not necessarily confined to officialdom. It seems to be rather a state of mind (from which few who dwell more or less cloistered lives apart from their fellows and the vulgar struggle for existence) can escape. We think it was David Starr Jordan, a splendid research student in his early days, who, some years ago, wrote against the numbing and leveling influence of too well organized research in highly endowed laboratories. He stated that in his own experience, all of the work he had done of any note had been while he was a poor, struggling student without even adequate apparatus and supplies with which to conduct his experimental work.

Nothing in America seems to be able to resist the compulsion to become "bigger and better." But let us realize the fact and fortify ourselves as well as we can against it, that too much coordination and regimentation exacts its penalties as well as does too little of it. *H. E. D.*

COORDINATION OF RESEARCH

The age of individualism has passed, although here and there remnants of the old system survive. The American genius for organization, however, has left but few of them undisturbed. No longer does the poor inventor starve unappreciated in a garret and conduct his experiments with inadequate equipment. Today he works in a great laboratory, with every facility available, encouraged and supported by the corporation which plans to utilize his discoveries. No longer does the laborer toil hopelessly long hours under bad conditions for a wage insufficient to keep his family from want. Today he bargains collectively, and prospers beyond the largest dreams of his predecessors. No longer does the small manufacturer turn out a limited quantity of wares which differ from all those made by others in the same line. Today, the small businesses are gathered into large corporations, their products are standardized, the cost of production is halved, and the market doubled. The college consists no longer of Mark Hopkins at one end of a log and a student at the other; but in the immense university, thousands of students learn facts and methods in keeping with the newer knowledge of the universe and the magnitude of the civilization of which they are a part. Even medical research is no longer isolated. Men of wealth have dedicated their riches to the public from whom it came by establishing great foundations for the sole purpose of improving the health of the world. Research, thus, has not escaped the passion for organization which characterizes the present age; and this is well. Discoveries in the field of health have largely passed beyond the obvious stage, and study of the obscure, the intangible, requires concentration from which the individual worker is precluded by the necessity of self-support; it requires equipment which the individual is seldom able to accumulate; it requires coöperation which the individual can secure only too infrequently. Health research, as industrial research, must yield to the exigencies of the situation and accept organization if it is to produce results which justify it.

This tendency toward coördination of the immense amount of research now being conducted throughout the world is evident in the expressions of health workers frequently appearing in the press, both lay and professional. Some one has recently commented on the thousands of experiments conducted without fruition. The experimenters need a guiding hand to eliminate the useless research, and save the time spent for productive study. It is obvious, also, that thousands of isolated experiments have failed to bear fruit because the seed fell on stony ground; that is, because the findings did not reach the attention of those who were able to appreciate their value. A central correlating agency is imperative if the results obtained are to be commensurate with the effort expended.

This much appears to be conceded quite generally. The point that is not yet satisfactorily worked out is the proper coördinating agency. There would appear to be several possibilities.

The first and most obvious would be the designation of such an agency by the national Government. There is now a bill before Congress to establish a National Institute of Health, using

(Continued on page 289)

Editorial from the Pennsylvania Medical Journal, January, 1929.

THE PRESIDENT'S PAGE

REFLECTIONS ON CELL GROWTH

The Wisconsin Surgical Club, while on a study trip to New York a few years ago, visited the Rockefeller Institute in that city, and, through the courtesy of Dr. Alexis Carrel, were able to see his moving picture film showing the growth and life process of connective tissue cells. We could see cell division actually taking place before us on the screen, step by step. While this was very interesting, it was still more interesting to learn that the growth of this tissue had been in continuous progress for a number of years, and as far as Doctor Carrel could tell, this tissue would continue to grow, divide, and subdivide indefinitely, provided sufficient nourishment and favorable living conditions were maintained. In order to give us an idea of the rapidity of cell division and cell growth he stated it had been calculated that if such growth were not checked by natural processes, in a number of years (I do not remember how many, nor does it matter for our purpose) the total amount of this growth would aggregate to a lump as big as the sun.

Biologists tell us that the single-celled animal, the lump of protoplasm with its nucleus, is able to reproduce itself by division an infinite number of times, without interruption. In the multi-celled animals, however, the ability of growth and reproduction of its individual cells has distinct limitations which later become more numerous as the number of cells that form the individual increases to millions and billions. As the result of this community cell growth in such complex individuals as animal and man, groups of cells form for special purposes and an organ formation takes place. These various groups of cells assume definite functions, and the individual cells change their internal structure, become, as we say, differentiated. Thus, the primary cell may develop into a special connective tissue cell, a muscle cell, liver cells, nervous tissue cells, etc., each type of cell assuming a special function to the partial, though not entire, exclusion of most of the other functions possessed by the non-differentiated cells. The capacity for continuous growth and unlimited reproduction, as found in the uni-cellular animal, is partially lost by the differentiated cell, and reproduction is now performed by the special cells of the ovary and testicle only. To be sure, connective tissue cells and muscle cells can still divide and subdivide, but can do so but a limited number of times. The sperm cell of the male after ripening does not reproduce itself at all. It is only the female ovum which reproduces, divides and subdivides after fertilization, and even this fertilized ovum does not go on dividing and subdividing indefinitely, but is limited in the number of divisions it can undergo. Thus, the fertilized ovum of the mouse, until it is full grown, goes through nineteen divisions—we will call them cycles—eleven of them which occur before birth, the other eight after that time. The human ovum divides twenty-three times in utero. After birth the cells of the child complete four more cycles, twenty-seven in all, before it reaches its full growth. Then general cell division, that is, further growth, is stopped. Only isolated reproduction of cells can still take place and that for but such special purposes as repair for replacement of cells destroyed by use or trauma, etc., showing, however, that the original function of cell multiplication is still present even in differentiated cells, though but to a limited extent. Evidently the rate of cell division, once begun, slackens materially after a while, as can be deduced from the fact that the first twenty-three cell divisions in man take but nine months, while the last four cycles take from eighteen to twenty-two years until man is full grown. It is also safe to assume that even in utero, towards the last months in uterine life, the rate of cell division is gradually slackening, becoming much slower than during the first months of gestation. In other words, the mysterious stimulus to continuous growth, though starting at a furious rate, gradually slows down, and eventually exhausts itself when puberty is reached. In still other words, we begin to die before we are born.

The means that stop further growth we know. Life in any form presumably originated in the sea and water continues to be the supreme demand of all life. The cells of all animals in the early stages of growth are high in water contents. As growth is completed this content is reduced and all cells are brought to the same colloid state. The tissues become more dry and are distinctly so in disease and old age.

That the glands of internal secretion have a great deal to do with that, we also know. We only need to think of the dryness of the tissues that ensues in the absence or loss of the thyroid gland. Which one of the glands of internal secretion it is, whether the thymus, thyroid, or hypophysis, the interlocking action of these glands makes physiologists hesitate to tell.

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SOCIETY PROCEEDINGS

BROWN-KEWAUNEE

The Brown-Kewaunee County Medical Society held its monthly meeting at the Northland Hotel, Green Bay, on April 23rd, at which time dinner was served. The balance of the evening was taken up by Dr. Francis D. Murphy, of Milwaukee, in the discussion of "Chronic Nephritis with Lipoid Changes in the Kidney and Other Organs," illustrated with lantern slides. It was a very interesting subject and was well handled by the speaker.

At a meeting on May 13th, Dr. N. E. Uelman of Milwaukee was the speaker of the evening. *M. H. F.*

CHIPPEWA

The members of the Chippewa County Medical Society met at Hotel Ottawa, Chippewa Falls, on April 23rd. Dinner was served at seven and followed by an instructive program: Four reels of moving pictures supplied by Davis and Geck on "The Absorption of Sutures in Wounds;" Dr. R. B. Stout, Surgical Section of the Jackson Clinic, Madison, "Recent Developments in Spinal Anaesthesia;" Dr. Rollin Schwartz, Chippewa Falls, "Health Problems of Chippewa Falls;" and Dr. A. W. Bryan, Department of Neurology, Jackson Clinic, Madison, "A Neurology Topic of Interest to the General Practitioner," illustrated by motion pictures. *W. C. H.*

COLUMBIA

Dr. John W. Powers, Milwaukee, addressed the Columbia County Medical Society at Portage on the evening of April 30th, following a six-thirty dinner at Hotel Raulf. He showed films on "Fracture of the Neck of the Femur," demonstrating the Whitman method of abduction and his modification of Whitman's operation for un-united fracture in this location. This was a very fine demonstration and he made the subject very clear.

Following this Dr. H. E. Gillette, Pardeeville, gave a short report of a case of "Undulant Fever" with a talk on this disease. *H. E. G.*

DOUGLAS

Members of the Douglas County Medical Society held their May meeting at Superior on May 8th at Hotel Androy. The scientific program included "Treatment of Goiter," by Dr. Arnold Jackson of Madison, and "Spinal Anesthesia," by Dr. Richard Stout of Madison. *J. M. McG.*

EAU CLAIRE

The Eau Claire and Associated Counties Medical Society met on Monday, April 29th, at Hotel Eau Claire of that city. Following dinner Dr. W. C. Carroll, St. Paul, Minn., spoke on "Cervical Ribs." This was discussed by Dr. E. L. Mason and Dr. Jos. C. Baird. "Focal Infections in the Mouth" was the subject of a paper by Dr. Baird, discussion by Dr. R. F. Werner and Dr. F. G. Anderson. *E. E. T.*

GRANT

An afternoon and evening meeting of the Grant County Medical Society was held at Lancaster on May 23rd. Members of the society were hosts to the members of neighboring counties. The scientific program included "Clinical Significance of Ureteral Obstructions," by Dr. George Ewell, Madison; "Report of a Case of Undulant Fever," by Dr. F. H. Baldwin; "Undulant Fever," by Dr. W. D. Stovall, Madison; "Uses and Abuses of Local Anesthesia," by Dr. Edmund H. Mensing of Milwaukee; and "Diagnosis and Treatment of Peptic Ulcer," by Dr. R. C. Blankinship of Madison. Discussions were led by Drs. S. W. Doolittle, J. C. Betz, Wilson Cunningham, and R. E. Terry. *M. B. G.*

GREEN LAKE-WAUSHARA-ADAMS

The Green Lake-Waushara-Adams County Medical Society held the second of its series of monthly meetings this spring the first week in May. Following a dinner at Hotel Whitting, Berlin, Dr. Albert A. Tormey, Madison, presented an address on "Infections of the Hand," illustrated by motion pictures. *A. J. W.*

JEFFERSON

The Jefferson County Medical Society held its first meeting of the year Thursday, April 18th, in the Elk's Club at Watertown. Dr C. M. Kurtz, Madison, spoke on "The Determination of Cardiac Enlargement and Its Significance in Diagnosis." Dr. P. F. Greene, Madison, gave a talk on "Leadership in Medicine," and Dr. R. C. Buerki, Madison, took an active part in the discussion that followed. Twenty-one members were present at the dinner which preceded the business session. *M. G. P.*

LA CROSSE

The regular April meeting of the La Crosse County Medical Society was held at Oak Forest Sanatorium, Onalaska, on Monday evening, April 22nd. There were twenty-four members present.

Dinner was served at seven by the Sanatorium. Dr. P. A. Teschner of the Wisconsin Anti-Tuberculosis Association gave an interesting paper on the diagnosis of tuberculosis. Two new members were admitted to the society; Dr. M. W. Ward of Bangor and Dr. C. J. Moran of West Salem. *J. E. H.*

MARATHON

The monthly meeting of the Marathon County Medical Society was held on Wednesday evening, May 1st, at eight o'clock at St. Mary's Hospital, Wausau. Three reels of motion pictures were shown on the "Diagnosis and Treatment of Syphilis and Gonorrhea." *V. E. E.*

MARINETTE-FLORENCE

The members of the Marinette-Florence County Medical Society held their regular monthly meeting on Tuesday evening, April 23rd. Dr. John W. Powers, Milwaukee, presented the subject of "Treatment of Ununited Fractures of the Neck of the Femur," with film illustrations.

On Friday evening, April 26th, the society gave a formal reception and dinner in honor of Dr. and Mrs.

Edward Sawbridge, of Stephenson, Mich., at the Studio Club. Covers were laid for forty, the local physicians and their wives being present. They were presented with a beautiful silver service and after the post-prandial talks and stories, cards were the diversion of the evening. Dr. and Mrs. Sawbridge will reside in Stephenson, Mich., where the doctor has practiced for many years and is president of the local bank, president of the school board, president of the Upper Peninsula Tuberculosis Sanatorium, president of the Menominee County Fair Association and interested in other activities. Mrs. Sawbridge is a charming woman who has spent much of her time in California.

The Marinette-Florence County Medical Society held its May meeting on May 3rd at Marinette. Dr. P. A. Teschner of the Wisconsin Anti-Tuberculosis Association presented a paper on "Tuberculosis in Childhood." He also presented slides to illustrate his address. Dinner was served at the Green Mill preceding the scientific session. *M. D. B.*

MILWAUKEE

The functions of a large county medical society and the advisability of employing a full time secretary was the subject of a meeting of the Milwaukee County Medical Society held at Hotel Pfister on May 10th. Mr. William J. Burns, executive secretary of the Toledo (Ohio) Academy of Medicine, presented this general subject matter to over 100 members present on the basis of the work accomplished in Toledo.

It is probable that the county society will manage a physicians' service bureau to be established in the early fall. The manager for such a bureau would also act as executive secretary for the society, if present plans mature. *E. L. T.*

RACINE

The monthly meeting of the Racine County Medical Society was held Friday, April 28th, at Sunny Rest Sanatorium Dr. G. L. Bellis, Muirdale Sanatorium, addressed the meeting on the subject "Tuberculosis and Pneumoconiosis and Its Relationship to the Workmen's Compensation Law." Drs. T. L. Harrington and A. A. Pleyte of the Wisconsin Anti-Tuberculosis Association were present at the meeting. Dinner was served at five-thirty and the attendance for the meeting was good. *S. J.*

ROCK

Approximately sixty physicians and guests attended the regular monthly meeting of the Rock County Medical Society which met in the Hotel Hilton, Beloit, at six-thirty for the dinner and business meeting. "Skin Infections" was the subject of the paper presented by Dr. Cleveland White, of Chicago. Dr. Harry Oberhelman, Chicago, also addressed the physicians. Both lectures were illustrated with lantern slides. *H. E. K.*

GREEN BAY ACADEMY

Dr. Paul B. Magnuson of Northwestern University, Chicago, addressed members and guests of the Green Bay Academy of Medicine at a meeting on May 8th. Dr. Magnuson's subject was "Prevention of Deformity Following Fractures by Proper Early Treatment, as Opposed to the Correction of Deformity Caused by Old Fractures."

At a business session of the Academy Dr. O. A. Stiennon was elected president; Dr. E. S. Knox, vice-president; Dr. H. Hendrickson, secretary-treasurer; and Drs. R. L. Cowles and Walter Mueller elected as members of the executive committee.

MILWAUKEE ACADEMY

Dr. C. H. Bunting, Madison, addressed the members of the Milwaukee Academy of Medicine on April 23rd. His subject was "The Blood: Its Embryology, Anatomy and Function." Discussion was opened by Dr. Forrester Raine, Milwaukee.

Dr. Bunting opened a series of lectures on the blood and vascular system. The program committee has felt that the members of the Academy might be interested in an organized course of lectures covering a definite subject. A very general subject has been selected. Therefore, to try it out.

"Blood as a Fluid" was the second of a series of addresses by Dr. Walter J. Meek, of the University of Wisconsin, at a meeting of the Academy held on May 14th. The discussion was opened by Dr. Louis Warfield. *D. E. W. W.*

MILWAUKEE OTO-OPHTHALMIC

"Physical Examination of Aviation Pilots" was the subject of an address before the Milwaukee Oto-Ophthalmic Society at its meeting on May 13th. The address was presented by Dr. Harry V. Wurdemann of Seattle.

The society also announced their cooperation in a post-graduate course conducted at Marquette, May 20-25th, by Dr. Franz Hasslinger, docent of the Hajek Clinic of Vienna.

MILWAUKEE PEDIATRIC

Dr. Henry Helmholz, Rochester, and Drs. E. J. Carey and B. J. Malnekoff were speakers at a meeting of the Milwaukee Pediatric Society held on May 8th.

SEVENTH COUNCILOR DISTRICT

Physicians and dentists in the Seventh Councilor District held their second annual joint meeting at Galesville on May 16th. The program for the meeting, which started at 4 p. m., follows: Address of Welcome, Mayor Leonard Smith of Galesville; Opening Remarks by Dr. H. A. Jegi, president; illustrated address on "Surgical Treatment of Infected Teeth," by Dr. M. N. Federspiel of Milwaukee, with discussion opened by Dr. W. E. Bannen of La Crosse. The members were entertained during the supper by the Galesville orchestra and municipal quartette.

After the supper, the members had the opportunity of hearing Dr. K. W. Doege, Marshfield, president of the State Medical Society. The last address of the meeting was on "Plastic Surgery and Its Relation to the Practice of Medicine, Dentistry and Surgery," by Dr. G. V. I. Brown of Milwaukee.

The next annual meeting will be held at Sparta.

R. L. MacC.

NINTH DISTRICT

The annual meeting of the Ninth Councilor District Medical Society was held at St. Michael's Hospital, Stevens Point, on the afternoon and evening of May 8th. The program follows: 4:00 p. m. sharp—Medical clinic on Metabolic Diseases, Dr. Elmer Sevringhaus, Madison; 6:00 p. m.—Dinner; 7:00 p. m.—Annual meeting and election of officers, followed by scientific program. Dr. Joseph F. Smith, Wausau, spoke on "Intestinal Obstruction;" Dr. Lyman A. Copps, Marshfield, on "The Effects of Increased Intracranial Pressure;" and Dr. Carl Eberbach, Milwaukee, on "Medical Experiences Among the Labrador Eskimos."

Following the scientific meeting, Dr. W. W. Gregory of Stevens Point was elected president of the District Society for the ensuing year and Dr. Joseph F. Smith, Councilor, was re-elected secretary. There was an attendance of seventy-seven at this meeting, which exceeded all previous records. *J. F. S.*

NEWS ITEMS AND PERSONALS

Dr. K. W. Doege, president of the Marshfield Clinic, returned on May 5th from Germany where he attended the meeting of the German Surgical Society, of which he is a member. He also attended the meeting of the German Medical Society which was held at Wiesbaden the latter part of April.

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Dr. and Mrs. Wm. S. Middleton, Madison, left the first of May by motor for Atlantic City, after which they went to Philadelphia for a brief visit with relatives before sailing on the "Majestic" for Cherbourg.

They plan to visit Bordeaux, the Riviera and Dijon, and the British war lines in France and Belgium, the region of their war service. After a time in Paris and the chateau country, they will cross the channel to England, traveling in that country and Scotland. Dr. and Mrs. Middleton expect to return to Madison in July.

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Dr. J. Gurney Taylor, of the State Board of Medical Examiners, has announced the appointment of John P. Jasin, Milwaukee chiropodist, to the board, succeeding Arno Krieger whose term expired January first last.

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Dr. William Hipke, Marshfield Clinic, sailed for Europe on the 10th of May. He will spend the spring and greater part of the summer at the University of Vienna doing post graduate work in diseases of the eye, ear, nose and throat. Mrs. Hipke expects to join her husband in the fall and they will then tour the continent together.

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A plan under which emergency medical service may be available at all hours under sponsorship of the city government of Milwaukee and physicians, has been agreed upon temporarily.

At a meeting called by Dr. John P. Koehler, health commissioner, recently, Dr. Henry J. Gramling, president of the Milwaukee County Medical Society, was authorized to submit a list of forty physicians who will register for emergency service. These physicians will live in various sections of the city, so that as soon as there is a call for the fire or police department rescue squads, the nearest physician will be summoned simultaneously.

Should the case be of medical nature, the rescue squad will retire. Heretofore there has been some criticism because the rescue squads have gone into homes where there were contagious diseases, exposing themselves and others to the disease.

Some plan of compensation for the physicians who answer calls will be worked out. It is likely there will be a fixed fee of $5.00, to be paid by the patients, if they are able to pay, and if not, by the city.

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Dr. Ralph M. Carter, Green Bay, appeared before a joint meeting of the Chicago Society and the Chicago Society of Industrial Medicine and Surgery, held at the Medical and Dental Arts Building the evening of May 1st. "Factors in Determination of End Results and Permanent Disability Following Injuries" was the subject of his paper.

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Dr. and Mrs. Edward L. Miloslavich, Milwaukee, left on May 8th for a four months' trip to Europe, where the doctor will study in hospitals in Vienna, Naples, Rome, Milan and the Hague.

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Dr. Walter G. Darling, Milwaukee, was re-elected Shorewood health commissioner at a meeting of the village board of health recently. Dr. T. L. Szlapka was appointed to the village board at the same meeting.

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Personal property valued at $40,000 was left by Dr. Charles S. Sheldon, Madison, who died on April 20th at the age of eighty-seven. The bulk of the estate was left to his widow, Emma H. Sheldon, to be used during her lifetime. Upon her death, however, the will provides that a trust fund of $10,000 shall be created, the income from which to be used by his daughter, Mrs. Helen S. Lyman, Madison. At her death the income can be used by her children.

After the former two bequests have been taken out of the estate, the balance will be divided among a son, Sidney, Seattle, Wash., Dr. Walter H. Sheldon, Madison, and Stanley H. Sheldon, Portland, Ore.

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Dr. S. E. Gavin, Fond du Lac, has received from the Bureau of Areonautics at Washington an appointment as examining physician for aviators and is soon to be furnished with the special equipment needed to conduct such physical examinations.

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Dr. A. M. Rosenheimer has sold his home at Fox Lake and will take over the practice of the late Dr. A. J. Krahn, in Beaver Dam, which will give him a larger field.

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The Madison General Hospital will open its new addition about May 20th or 22nd. The four floors contain the most modern equipment and furnishings. At present only twenty-eight of the private rooms will be used for patients, while the other twenty-five will be occupied by nurses until other facilities are offered. The new addition has space for x-ray fluoroscopic examination, and physcical therapy rooms. These rooms connect with the operat-

ing rooms of the old building, thus facilitating the change of a patient from one department to another. In every examination room there are dressing rooms and every convenience for the patient. There is one fracture room, a viewing room for files, a waiting room and several treatment rooms.

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The scientific session of the American Heart Association will be held in Portland, Ore. on July 9th, during the meeting of the American Medical Association.

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Dr. V. A. Chapman, has announced the removal of his offices from the Colby-Abbott Building to the Guaranty Building, 110 East Wisconsin Ave., Milwaukee.

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A general health center, containing facilities for a public clinic, a recreation hall, lecture room for expectant mothers and a room where poor mothers may leave their babies for the day while they work is desired by Health Commissioner J. P. Koehler of Milwaukee for the northwest side, he said in a recent lecture before the Central Council of Social Agencies at the Y. M. C. A.

Dr. Koehler advocated that all public and private welfare organizations be directed by a central board of control. He was supported in that policy by William L. Coffey, manager of county institutions.

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"A present menace is to give all emphasis to preventive medicine to create a general belief that if the disease isn't prevented we may as well throw up the sponge," Dr. C. M. Gleason, Manitowoc, told Kiwanis Club members recently, in a general discussion of health.

Dr. Gleason's talk was non-technical and interesting to the members, relating as it did to historical facts with which the world at large is familiar and at the same time showing the importance of scientific research work of the medical profession.

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Physicians and surgeons from Wisconsin Rapids, Wausau, Stevens Point, Neillsville, and other communities in Wood, Marathon, Portage and Clark counties gathered on April 17th to attend the banquet at Hotel Charles and the subsequent meeting at the Marshfield Clinic. Dr. John Powers, Milwaukee, addressed the physicians on "Ununited Fractures of the Neck of the Femur," and Dr. Edward Miloslavich, also of Milwaukee, spoke on "My Medico-Legal and Criminological Experiences in Wisconsin." A general discussion followed.

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Friends and followers of Dr. Arthur S. Loevenhart, late professor of pharmacology and toxicology and noted scientist of the University of Wisconsin, Madison, met recently in the Service Memorial Institute building to eulogize and study his works.

A number of letters of appreciation of Dr. Loevenhart's influence, written by past students of the professor, were read at the gathering.

Speakers were Dr. A. L. Tatum, professor of pharmacology; Dr. H. C. Bradley, described his war work; Dr. W. F. Lorenz, spoke on his clinical achievements, and Dr. W. J. Meek, assistant dean of the medical school, read letters about him.

A measure granting immunity from parking restrictions to physicians of the Emergency Hospital staff and those employed by the Milwaukee attorney's office on industrial commission work was approved recently by the council judiciary committee.

It was suggested that physicians enjoying the special privilege be allowed to put metal signs on their license plates that would inform police of their work.

Physicians are now immune from night parking restrictions and special consideration has always been given physicians on the Emergency Hospital staff.

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Tuberculosis sanatoria of Wisconsin were among the institutions of the state which joined in the observance of National Hospital day, May 12th, by the holding of open house, according to an announcement made by Dr. Hoyt E. Dearholt, executive secretary of the Wisconsin Anti-Tuberculosis Association.

Hospitals and sanatoria throughout the country joined in the ninth annual observance of this day which commemorates the birthday of Florence Nightingale, pioneer in modern hospital and nursing methods. The observance of this day is aimed to show Wisconsin citizens what are their local facilities for the study of diseases and how the staffs of these institutions are prepared to make their contributions to the saving and lengthening of human life.

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Dr. W. T. Lindsay was reelected president of the staff of Madison General Hospital at the annual meeting recently. Dr. A. R. Tormey was chosen vice president; Dr. L. W. Littig, secretary, and Dr. H. M. Kay, treasurer. Dr. R. T. Cooksey presented a paper on "Spinal Anesthesia."

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Dr. Walter Straub, professor of pharmacology at the University of Munich, presented a paper on "Digitalis" at a special meeting of the University of Wisconsin Medical Society on May 8th.

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Dr. C. J. Smiles, Ashland, announces the establishment of separate offices in the Masonic Temple Building at Ashland. For several years Dr. Smiles has been associated with The Clinic at Ashland. He is a member of the staff of both the Ashland General and St. Mary's Hospitals.

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Eleven senior medical students at the Medical School of Marquette University, Milwaukee, were honored by election to "Circle," honorary scholastic society, during May. The students elected were Jack Hoogerhyde, Harry A. Gerber, Walter A. Schweitzer, Paul E. Medema, Nicholas D. Pappas, Joseph Shaiken, Henry W. Haasl, Florian F. Zboralske, George M. O'Brien, Raymond J. Winkler, and Harold R. Weinzimmer.

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Dr. Hoyt E. Dearholt, Milwaukee, secretary of the Wisconsin Anti-Tuberculosis Association, spoke on "The Extension of the Program of Tuberculosis Associations to Other Diseases" at the annual meeting of the national association held at Atlantic City the last week in May.

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"The Investment in Human Beings" was the subject of

an address by Dr. E. V. Brumbaugh, deputy health commissioner of Milwaukee, at a meeting of the West Bend Kiwanis Club the first of May.

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Dr. J. C. Devine, Fond du Lac, addressed a public audience at that city on National Health Day. Dr. Devine commended the recent decision of the county medical society to cooperate in a movement looking towards the periodic examination of school children.

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Dr. G. W. Carlson, Appleton, spoke on the prevention of tuberculosis at a meeting of the Appleton Parent-Teachers' Association of that city the first week in May.

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Dr. W. T. Morrison, Edgerton, was elected health officer of that city recently.

—△—

Dr. G. L. McCormick, Marshfield Clinic, is discontinuing the practice of general medicine to become an assistant in the department of the clinic devoted to eye, ear, nose and throat. He is now taking post-graduate work at the University of Illinois and will return the middle of June.

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Dr. W. W. Bauer, health officer of Racine, announced in an address before the American Legion of that city during May, plans for the examination of pre-school age children this summer. The thought is to secure correction of defects found before the opening of the school year.

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The importance of early detection and prevention of disease was emphasized in a talk before the Milwaukee Teachers' Association on May 9th by Dr. D. W. Roberts of Sacred Heart Sanitarium. Dr. Roberts is chairman of the health committee of the Milwaukee Civitan Club.

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Members of the Wisconsin Homeopathic Medical Society met at Madison on May 24th.

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Dr. E. J. Ball, Nekoosa, has sailed for Europe to do post-graduate work this summer. He will return in the late summer.

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Dr. Helen Binnie and Dr. Margaret Pirsch, Kenosha, president and secretary of the Kenosha County Medical Society, were injured in an automobile accident at Milwaukee the second week in May. Dr. Binnie suffered a broken arm and Dr. Pirsch received severe bruises and contusions. Both are still at St. Mary's Hospital, Milwaukee.

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Dr. William J. Mayo, Rochester, will deliver the commencement address at the exercises of Marquette University on June 12th.

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Mrs. G. G. Wegman, wife of Dr. Wegman of Milwaukee, was injured in an automobile accident near Lake Mills in the second week in May. Dr. Wegman turned suddenly to avoid a child who had run into the path of his car, when the car went into the ditch and turned over, injuring Mrs. Wegman.

Dr. J. Newton Sisk, Jackson Clinic, Madison, visited in Cleveland, Ohio, during May.

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Dr. E. C. Rosenow of the Mayo Clinic addressed students and preceptors of the University of Wisconsin at Madison during May on the subject of "The Practice of Medicine in Its Relationship to Bacteriological Research." Dr. Rosenow's address was under the joint auspices of Alpha Omega Alpha and Sigma Sigma, honorary medical societies. Dr. Rosenow was born at Alma, Wisconsin.

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Four members of the State Medical Society of Wisconsin were appointed by Dr. K. W. Doege, president, as a committee to aid the state industrial commission in the formulation of rules regulating the storage of films and chemicals, following the Cleveland Clinic fire. Those appointed include Drs. C. W. Muehlberger, state toxicologist, Ernst Pohle and Ralph M. Waters of Madison, Dr. John W. Coon of Stevens Point, president of the Wisconsin Hospital Association, and J. G. Crownhart, secretary of the State Society. The committee met for the first meeting on May 21st at Madison.

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Boys who have sudden aches and pains when the Milwaukee baseball team plays at home, have little chance to fool the principal of the Twenty-first Street school of that city. The principal is Dr. George Koeppel, who is a graduate of Illinois and who later taught at the old Milwaukee Medical College.

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Industry's part in the eradication of tuberculosis was the subject of a conference held under the auspices of the Kenosha Chamber of Commerce on May 6th. Dr. Thomas Dobbins, Kenosha, presided at the meeting and the principal address of the evening was made by Dr. C. F. N. Schram of Beloit.

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The past winter was marked by a higher death rate than the average for the last five years. This is evident from the mortality statistics for the first quarter of 1929, announced in May by the state board of health. With reports of 9,127 deaths in January, February and March, the state had a death rate of 12.5 per 1,000 population. For the corresponding period in 1928 the rate was 10.4.

The increase is partly due to the influenza epidemic which swept over the state in November and December, 1928, says the report. Many who contracted influenza late in 1928 died early in 1929. January alone recorded an increase of 595 deaths from influenza over January, 1928. This epidemic caused an excess mortality of 2,194 from influenza and pneumonia. In other words, according to the bureau of vital statistics, had the state not been visited by the influenza outbreak, 2,194 persons now dead would be alive.

"The material increase in deaths ascribed to pneumonia whenever there is an outbreak of influenza of a virulent type is due in part, we believe," the report says, "to a tendency on the part of some physicians to enter the cause of death as pneumonia without qualification, whereas the cause should probably be given as influenza with pneumonia complications."

ENGAGEMENTS

Dr. Reuben Harold Stiehm, Madison, to Miss Marie Wilhelmina Dueno, Milwaukee.

MARRIAGES

Dr. Myra Emery, Kenosha and Madison, to Dr. Mead Burke, Madison, on May 18th. They will make their home in Kenosha.

Dr. L. J. Unterholzner, Madison, to Miss Muriel Ladd, Dodgeville.

Dr. Richard D. Evans, Santa Barbara, California (formerly of Evansville), to Miss Elizabeth Bristol, Long Island, New York.

DEATHS

Dr. Michael Iversen, Stoughton, died suddenly on April 22nd in the hospital at Mendota, where he had gone for treatment a week previous following a break in health which resulted from a stroke last December. Dr. Iversen was a native of Bergen, Norway, where he was born November 30, 1861. After completing a medical course at the University of Oslo, he specialized in surgery at Freiburg University, Germany. In March, 1891, he came to the United States and went directly to Stoughton where he has practiced continuously since that time.

Realizing keenly the need of a hospital in Stoughton, Dr. Iversen bought the old Stoughton Academy property and in 1904 opened a surgical hospital which he successfully conducted until the management of the institution became too heavy a burden, causing him to dispose of it to the city a few years ago. It is now being operated by a community hospital association with financial aid from the city.

The deceased was a member of the Dane County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. He is survived by his wife and three daughters.

Dr. John F. Farr, Eau Claire, died at the Sacred Heart Hospital of that city on May 9th, following a short attack of pneumonia. Dr. Farr was born at Wellsboro, Pa., on March 15, 1862, and came to Eau Claire with his parents in 1879. In 1882, with his brother, he opened a drug store in Eau Claire which was continued ten years. He entered Hamline University to study medicine in 1892, graduating in 1897. He returned to Eau Claire to begin the practice of medicine in that city in 1898 and had practiced continuously since that year.

Dr. Farr served as city health officer of Eau Claire from 1905 to his death. He was a member of the Eau Claire and Associated Counties Medical Society, the State Medical Society of Wisconsin, the American Medical Association, and was also a member of the Masonic order and of the Elks. He is survived by his widow, a son, brother and two daughters.

A Note on the Scientific Work of Professor A. S. Loevenhart*

By CHAUNCEY D. LEAKE, PH.D.
Professor of Pharmacology, University of California

Whenever a dynamic personality passes there is a sudden loss of power in our own lives which is not recovered until we can grasp that passing spirit and fuse it into ours. What potential power there is in such a spirit has been felt by all of us who may have known by close association in work and play some great person. Dr. A. S. Loevenhart was such a man.

In 1924, five years ago, I collected what reprints of Doctor Loevenhart's I could find loose about the laboratory, and what I could coax from William Young, and had them bound into three volumes. Each volume contains about twenty reprints written by Doctor Loevenhart or under his direction. Since that time Doctor Loevenhart has published more than enough for another volume of the same size.

In glancing hurriedly over these collected reports, one is struck by the variety of significant biological and chemical problems which interested Doctor Loevenhart. His second publication, the famous one with Kastle in 1900, describing the reversibility of lipase action, is one of the really important biological discoveries of this generation. No physiologist or physician should fail to read his great paper on lipogenesis, in which he describes the distribution of lipase in the body and its relation to fat deposition. A year or so ago he returned to the study of the remarkable fluorid inhibition of lipase action, which he had studied years before with Doctor Amberg and others. I hope to be permitted to report some of these recent findings before the Thirteenth International Physiological Congress in Boston.

Upon coming to Wisconsin in 1909, Doctor Loevenhart energetically tackled the problem of biological oxidation, his contributions with Gasser, Eyster and others furnishing most important theoretical and practical conclusions. These were summarized to 1915 in Doctor Loevenhart's Harvey Lecture. The significance of oxidative processes being the chief source of energy in living organisms, a proposition consistently preached by Doc-

*Note: Arthur Solomon Loevenhart was born Dec. 31, 1878, in Lexington, Ky. He secured his M. D. from Hopkins in 1903, and came to Wisconsin in 1909 as Professor of Pharmacology. He died April 20, 1929, in Baltimore, after an operation for peptic ulcer. He developed at the University of Wisconsin one of the best and most productive pharmacological laboratories in the world.

tor Loevenhart, is only now beginning to be properly appreciated.

It is interesting that the practical aspects of some of Doctor Loevenhart's oxidation work has been so slowly recognized. Dr. Albert Young, one of Doctor Loevenhart's pupils, succeeded, in 1926, in arousing interest in the use of the salts of iodoxy-benzoic acid in arthritis. These substances, however, had been thoroughly studied by Doctor Loevenhart in 1911, and their clinical use in these conditions had also been suggested by him.

Similarly, Doctor Loevenhart in 1912 studied the extraordinary antiseptic powers of benzoyl peroxid, an insoluble agent which acts by the slow liberation of active oxygen, which does not coagulate protoplasm, and which actually promotes healing. At that time he suggested its clinical use. I am now happy to report that with the cooperation of Dr. Herbert Morrow and Dr. Hiram Miller of the Department of Dermatology of the University of California Medical School, it is being intensively studied clinically. In 5 per cent ointment it has already been shown to be superior to any preparation so far employed in chronic ulcerative skin lesions or infected lacerations.

There is little need of reviewing before a Wisconsin audience Doctor Loevenhart's remarkable work in organizing a cooperative effort for the study of methods of treatment of neurosyphilis. Many of the important aspects of this work are unpublished. This spirit of developing cooperation in the field of therapy by means of chemical agents was a great general contribution which Doctor Loevenhart made to American medicine. Nothing could give Wisconsin greater prestige in medical circles than the establishment of a therapeutic institute, such as he visualized, in his memory.

Doctor Loevenhart's interest in cerebral stimulation, which has been carried along so consistently and so dramatically in cooperation with Doctor Lorenz and others, is fresh in the minds of all of us. Less known, perhaps, are his extensive studies in connection with the pharmacology of the nitrites. His work in connection with the treatment of gastric hyperacidity, which was based on his own trying experiences, is an important clinical study. How unfortunate it is that so many of the promising fields of research which Doctor Loevenhart had planned for study must now be left to other hands or abandoned.

Doctor Loevenhart's influence in public life was great. His brilliant support of national defense in connection with the Chemical Warfare Service, his dignified support of animal experimentation as a necessary aspect of medical investigation, his brilliant service to the state in criminal or commercial poisoning, his self-sacrificing support of the Madison zoo, and his exposition of fraud and quackery as exemplified in his famous patent medicine lecture, are aspects of his public life familiar to us all.

In closing this very inadequate impression of Doctor Loevenhart's scientific life, let me conclude with a paragraph which I included as a preface to the collection of his reprints which I mentioned as having been made in 1924.

> "Doctor Loevenhart is conspicuous in American biological science for his intellectual honesty, and for his scientific generosity. His enthusiastic friendship has been a great factor in the development of many civic and scientific enterprises. The meticulous care with which his work has been published stamps him as a scientist of the first rank. His judgment is extraordinarily sound and his memory is prodigious. His wit is spontaneous and his humor is graceful."

To this I must now add, to have been his pupil is a privilege and honor.

SOCIETY PROCEEDINGS

NEW MEMBERS

Swartz, K. A., 404 E. Jefferson St., Waupun.
Florin, A. C., 104 S. Main St., Fond du Lac.
Fisher, R. S., 104 S. Main St., Fond du Lac.
Ward, W. M., Bangor.
Oesterlin, E. J., 2200 Cedar St., Milwaukee.
Perlson, M. M., 730 North Avenue, Milwaukee.
Wilske, C. A., 470 Park Place, Milwaukee.
Jamieson, George, Racine.
Schneider, Hans, Dousman.
Westgate, H. J., Rhinelander.

CHANGES IN ADDRESS

Rosenheimer, A. M., Fox Lake, to 119½ Front St., Beaver Dam.

O'Connor, E. B., South Milwaukee, to 167 Morgan St., Tonawanda, N. Y.

Orban, Louis, Waupun, to West Hill Sanitarium, Riverdale, New York City.

CORRESPONDENCE

EMBALMING BEFORE CAUSE OF DEATH IS ASCERTAINED

State Board of Health, Madison, Wis., April 27, 1929.
Sister M. Josepha, Supt.
St. Mary's Hospital,
Superior, Wisconsin.
My dear Sister Josepha:

Mr. J. G. Crownhart, secretary of the State Medical Society, telephoned me concerning your communication to him in re of the privileges of embalmers handling bodies. I asked him to forward your letter to this department that we might reply. You ask if an embalmer may claim a body before the cause of death has been ascertained and certificate signed.

There is no law or regulation concerning the time after death a body is supposed to be embalmed. The law requires that before a body can be buried a burial permit must be obtained. The law does not state that a burial permit must be obtained or a death certificate filled out before a body is embalmed.

A death certificate must be filled out and signed by the attending physician or someone authorized to sign it if the attending physician cannot be found in time to put his signature to the certificate before the date of burial.

The handling of dead bodies in a hospital is left largely, therefore, to the regulation of the hospital and the undertakers whose services may be obtained by the parents, other relatives, guardian, or close friends of the person who died. The courts have held that a dead body belongs to the nearest of kin in the manner that the law designates governing property rights, and the services of the embalmer and the time of embalming is a matter of agreement between the nearest of kin and the embalmer.

This is all under the assumption, however, that the cause of death is supposed to be what we call a natural cause and not due to foul play or suspected foul play. If foul play is suspected as a factor in the cause of death of an individual, then the undertaker should not embalm the body until the proper officials have termed the cause of death, such as the coroner, and therefore have passed upon the probabilities of possible foul play in producing death.

Probably the most satisfactory time to embalm a body is from three to five hours after death, although different embalmers differ somewhat in their manner of procedure as to time. In view of the fact that the most satisfactory embalming can be done within a few hours after death, it is generally accepted that a death certificate should not be required. For example, if a body should die at eleven o'clock at night it would be difficult to obtain the services of the attending physician to sign the death certificate giving the cause of death. It would be even more difficult if the health officer's services had to be obtained and a permit issued before embalming was to be done. Even if death occurred some time before the noon hour many physicians object to having the undertaker visit their office in the afternoon when busy and the office is full of patients. Many undertakers appreciate this and endeavor to visit the physician at a time when he has a few minutes of leisure and therefore not interfere with his regular care of patients.

I have gone into the situation a little fully because there are many angles concerning which consideration must be given.

I presume that a hospital can have in its rules and regulations a provision that a patient dying in the hospital cannot be moved out of the hospital for a certain period of time. On the other hand, it is the custom of most hospitals to have the body of a patient that has died moved as quickly as possible after death. As before stated, if hospitals do not have a definite rule in regard to the removal of the dead then the services of an embalmer and the time of embalming is left with the nearest of kin.

Very truly yours,
C. A. HARPER,
State Health Officer.

OFFICIAL CALL

To the Officers, Fellows and Members of the American Medical Association:

The eighth annual session of the American Medical Association will be held in Portland, Oregon, from Monday, July the eighth, to Friday, July the twelfth, Nineteen hundred and twenty-nine.

The House of Delegates will convene on Monday, July the eighth.

The Scientific Assembly of the Association will open with the General Meeting held on Tuesday, July the ninth, at 8:30 P. M.

The various sections of the Scientific Assembly will meet Wednesday, July the tenth, at 9 A. M. and 2 P. M. and subsequently according to their respective programs.

Attest: William S. Thayer, President.
Olin West, Secretary. Frederick C. Warnshuis, Speaker, House of Delegates.

Chicago, Ill., April the fifteenth.

SCIENTIFIC ASSEMBLY

The General Meeting, which constitutes the opening exercises of the Scientific Assembly of the Association, will be held Tuesday evening, July 9, 1929, at 8:30. The Sections will meet on Wednesday, Thursday and Friday, July 10, 11 and 12, 1929.

Convening at 9:00 a. m. the Sections on

Practice of Medicine.
Obstetrics, Gynecology and Abdominal Surgery.
Laryngology, Otology and Rhinology.
Pathology and Physiology.
Orthopedic Surgery.
Urology.
Radiology.
Preventive and Industrial Medicine and Public Health.

Convening at 2:00 p. m. the Sections on

Surgery, General and Abdominal.
Ophthalmology.
Diseases of Children.
Pharmacology and Therapeutics.
Nervous and Mental Diseases.
Dermatology and Syphilology.
Gastro-Enterology and Proctology.

NOTE OF APPRECIATION

Mr. J. G. Crownhart, Secretary,
State Medical Society of Wisconsin,
Madison.

Mrs. Sheldon and family sincerely thank the State Medical Society for the lovely red roses sent, and appreciated the attendance of the council at the funeral on Monday.

LABORATORY TECHNICIANS

Milwaukee, Wis., May 8, 1929.

Mr. J. G. Crownhart,
Wisconsin Medical Journal,
Madison, Wisconsin.

Dear Mr. Crownhart:

The increasing importance of clinical pathology to the practice of medicine has made it imperative to organize a technical personnel. This step was taken by the American Society of Clinical Pathologists, who established a Registry of Technicians, with headquarters in Denver, Colorado.

They have requested me to ask you to publish the enclosed statement in the State Medical Journal, as it will be of interest to the general practitioner.

With kind personal regards, I am

Sincerely,
EDWARD L. MILOSLAVICH, M. D.

In accordance with the trend of the times, the practice of medicine is utilizing more and more the services of trained lay help. The advent of the laboratory as an indispensable aid to the diagnosis of disease has created a new specialty in medicine; that of clinical pathology. In order to carry on the numerous technical tests required in scientific diagnostic procedures, the laboratory director has found it necessary to train the technical personnel. With the standardization of hospitals and the urgent call for qualified laboratory assistants there has arisen a demand for proper standardization of the preliminary education and technical training of those enrolled in this new profession.

There has also been a desire on the part of those engaged in this useful calling to raise their status, similar to the evolution of the trained nurse of a generation ago. This want is now being taken care of by a national organization consisting of a body of men who are most vitally interested in elevating the intellectual and technical status of laboratory workers. The American Society of Clinical Pathologists has taken upon itself the task of organizing a Registry of Technicians with rules under which those qualified by education, technical instruction, and moral character will receive a certificate.

The subject is of interest to physicians in every field of endeavor, as many of them are desirous of securing the services of technicians to carry on the routine laboratory procedures.

There is no doubt that the elevation of the laboratory technician to the status of a respected and useful calling will be a great help to the medical profession, to the patient, and to the scientific practice of medicine.

The headquarters of the Registry of Technicians of the American Society of Clinical Pathologists are located in the Metropolitan Building of Denver, Colorado.

Another very desirable feature of the registry is the facilities it offers in finding suitable placement for registrants and in aiding physicians to find desirable applicants.

ADVOCATES REPEAL OF FEE-SPLITTING LAW

Sparta, Wisconsin,
April 29, 1929.

To the Delegates and Alternates, House of Delegates:
Dear Friends:—

I shall have the honor of representing the Monroe County Medical Society, at the coming meeting of the State Society.

At the last meeting of our County Society—with an almost 100% attendance—the following resolutions were unanimously adopted:

(1) "Resolved that the Monroe County Society go on record as favoring the repeal of the present state law regarding the division of fees or fee-splitting and in favor of the enactment of a law which will conform to the rules of ethics of the American Medical Association, as laid down for us by the Judicial Council of that body."

(2) "Resolved, also, that the Program Committee be requested to devote some time, at the next Annual Meeting of the State Medical Society, to the problems of the Country Doctor and the Country Hospital."

The following is the brief and simple rule of ethics referred to in the first resolution:

"PRINCIPLES OF MEDICAL ETHICS"
Chap. 2—Article 6.—Section 3.
"SECRET DIVISION OF FEES CONDEMNED"

Sec. 3—"It is therefore detrimental to the public good and degrading to the profession, and therefore unprofessional, to give or receive a commission. It is also unprofessional to divide a fee for medical service or surgical treatment unless! ! unless! !—the patient or his next friend is fully informed as to the terms of the transaction."

Kindly observe that this rule of ethics does not condemn or interdict the *open* division of fees. In fact it approves them—*provided*—the patient or his next friend is fully informed as to the terms of the transaction.

Nor does this rule of ethics give us the least hint as to how the fees should be collected; whether jointly or separately.

The Judicial Council which laid down for us that rule of ethics seemed to have two specific things in mind which they wished to condemn and interdict—namely—the giving or receiving of commissions for referred work and the secret, commercial division of fees.

Do you know that you and I may operate a case of surgery together and do it in strict conformity with every letter and implication of this rule of ethics and *yet!!!*—under the laws of this state—we may be arrested for criminal fraud and, if convicted, may be fined as much as $100.00; or incarcerated in the county jail for as much as six months; or in either event, suffer the annulment of our license to practice medicine and surgery?

At some session of the House of Delegates I shall want to ask the following pertinent question: "By what rules of ethics shall the rank and file of the medical profession, in our state, be guided and governed; those of the American Medical Association; or the American College of Surgeons and the Dane County Medical Society?"

It is a matter of medical history that fifteen years ago the Dane County Medical Society appointed a committee of twenty members, with instructions to secure the enactment of the present state law prohibiting any division of fees whatsoever; either secret or open. Such a law was duly enacted, with a full set of teeth—uppers and lowers.

That law goes so much farther than the simple rule of ethics laid down for us by the Judicial Council of the A. M. A. covering

the same subject, that I feel it will be pertinent to ask the Dane County Society—"how they got that way;" and whether, also, the State Medical Society or any component part of it (except the Dane County Society) ever went on record as favoring the enactment of any such drastic law: *The most drastic of any state in the Union covering the same subject.*

After over two years of diligent inquiry, both at state headquarters and among many well-informed men of our profession, I find no evidence that our State Society has ever officially discussed the advisability of such a law; much less given any county society authority or direction to advocate its enactment. I find no evidence that the Judicial Council of the A. M. A. ever advised the enactment of such a law in this state or in any other state. Nor can I find that any county medical society (excepting the Dane County Society) ever advised its enactment.

With the Dane County Society it *may* have been just a case of "spontaneous combustion"—*but*—the present law, which they sponsored, bears so close a resemblance to the celebrated and much discussed "oath" or "pledge" of the American College of Surgeons that one cannot easily escape the conviction that at least *some* of the members of that notable organization were foremost and militant advocates of the passage of the law.

Right here may I make myself perfectly plain? I do not impute to the members of the American College of Surgeons or the Dane County Society anything but the highest of motives and the finest of ideals. The tragedy of the whole situation, it seems to me, is this: That the members of those two fine organizations should impute to the rank and file of the profession—in our state—even fifteen years ago and, even, in Madison, so low a standard of manners and morals as to make so drastic a law, seem either wise of necessary.

But even if we assume that the law *was* justified fifteen years ago, it does not follow that it is justified *now*.

The past fifteen years have witnessed remarkable changes in the requirements for those who would enter our profession. Four years in an accredited high school; at least three years of premedical work in some accredited college or university; four years in medical college and from one to two years as internes or house physicians in accredited hospitals. All these young men since their graduation from high school, have spent from seven to ten years in preparation for their life work; and all that time under the direct influence and guidance of many of the finest and noblest spirits of our profession. To allow the present law to remain upon our statute books is—in my opinion—a gratuitous insult to the manners and morals of these fine young men as well as a sad reflection upon the influence of their homes and of their professors upon the direction of their lives.

I have practiced medicine in this state for thirty years and have had a fairly wide acquaintance with the members of our profession throughout that whole time. I shrink from believing and I do not believe that there ever existed among them—not even in Dane County—so low a standard of professional morals as to have justified the present drastic law.

Just what does this law mean to you and me? It means that you and I—unless we are partners—cannot *legally* operate a case of surgery together and collect a joint fee; even though the patient is fully informed of the terms of the transaction (as is provided by the A. M. A. Code of Ethics), and even though it would best suit the wishes and convenience of the patient and co-operating surgeons to have the fee—a joint fee; collected jointly and receipted jointly.

It means that you and I may operate a case jointly and we may follow every letter and implication of the A. M. A. Code of Ethics in doing that piece of co-operative surgery—*but!!*—if we do not go farther than that and collect our part of that joint fee separately (as is required by our state law and the "oath" of the College of Surgeons) we are guilty of criminal fraud and subject to arrest; to fine and imprisonment and to annulment of our license to practice medicine and surgery.

I ask again: "Whose leadership shall we follow in the matter of ethics; the leadership of the College of Surgeons or that of the American Medical Association?"

Some historical data: Doctor John B. Murphy's presidential address—in 1911—resulted in the appointment of the Judicial Council of the A. M. A. That Council was specifically charged with the suppression of the fee-splitting evil. They formulated the Code of Ethics which we are discussing; in which the *secret* division of fees is condemned and in which the *open* division of fees is just as plainly approved—*provided*—the "terms of the transaction are fully known to the patient or his next friend." Kindly mark this also: Neither the original Judicial Council, nor any which has succeeded it, has ever specified whether the fees should be collected jointly or separately.

In 1912 the American College of Surgeons was founded and incorporated in Illinois. They immediately adopted their celebrated "oath" which interdicts division of fees in any form whatsoever—either secret or open, and which also requires that all fees must be collected separately. Then followed extensive and intensive newspaper and magazine publicity against the division of fees; most of which was originated by and paid for by the College of Surgeons. That was in 1912.

In 1913 the Dane County Society secured the passage of our present law relating to fee-splitting. This law is nothing more or less than the "oath" of the American College of Surgeons translated into legal phraseology and bedecked with penalties worthy of the middle ages.

After reviewing the foregoing data and much other matter relative to this subject, I cannot escape the conclusion that had it not been for the militant advocacy of our present fee-splitting law by a few of the founders of the American College of Surgeons, then resident in a few of the large cities of this and adjacent states, there would have been no such law and no such indictment of the general run of physicians in this state.

Hoping and believing that our profession ranks well, so far as manners, motives, morals and ideals are concerned, with other learned and altruistic professions, we have meekly submitted to the enactment of a law which any other profession would consider a gross insult to its membership.

Let me make myself plain again. I have great respect for the ideals and manifest accomplishments of the College of Surgeons and for the fine quality of its membership. Some of my most intimate friends are members of that notable organization, and I count the inspiration of their friendship as one of the great joys of my professional life. Notable, indeed, have been their contributions to humanity through their passionate zeal for improving hospital equipment and management; and for improving the quality of surgery performed within and without hospital walls. But—while gladly acknowledging all the foregoing—I still believe the College of Surgeons has one fatal weakness and, to make matters worse—they do not seem to know it. It is this: *They are provincial.* Their membership is recruited almost entirely from the ranks of city surgeons who do not know and *cannot* know or understand the problems of their "country cousins" nor the circumstances which surround their lives and labors. Why? *Because—no man who has not (within the last ten years), practiced medicine and surgery in the country can possibly understand "what it is all about."*

One must live the life of a country Doctor to understand his problems and perplexities. One must live the life of a country surgeon to understand *his* problems and the problems of the hospital in which he must do his surgical work. Oodles of questionnaires, ash-barrel detectives, kitchen inspectors and "in at eight—out at nine" record investigators will not do.

Are the problems of the country doctor identical with those of his city brother? Must they be settled or *can* they be settled by identical means and methods? Shall I, a country surgeon, an utter stranger to the problems of my professional brother of the city, insist that he adopt my method of doing professional work? Shall he, an utter stranger to my problems, insist that I conform absolutely to his particular plan of work? Or—shall both of us start out upon the premis that each has a passion to live and labor, with honor to himself and to his profession, and that each shall be allowed and encouraged to make his adjustments to his own problems according to the dictates of his own conscience?

I maintain that our present fee-splitting law is the creation of a relatively small group of eminent surgeons who, with honest but misguided zeal, have sought to impel all of us, by law, to conform to their own particular conception of what is ethical in medical and surgical work; even to the details by which we shall keep our books and collect our fees.

There are 2,900 physicians in Wisconsin. Of that number—133 are members of the College of Surgeons. Not by the wildest stretch of the imagination could more than 5 of the 133 be called "country

surgeons." And *yet!!*—it would seem that this restricted group of well meaning men feel competent and under pressing obligations to order the manner, the method and the means by which we—their "country cousins" shall conduct our professional work.

From the foregoing it would appear to me that if the American Medical Association and our own State Medical Society are to retain their own self-respect and independence it is high time that each organization make perfectly plain to its members what particular leadership is to be followed and what rules of ethics are to prevail; those of the American College of Surgeons and Dane County Society or those of the Judicial Council of the American Medical Association.

There is now a gleam of hope that this may come to pass. If you will read the minutes of the A. M. A. House of Delegates—at the last meeting in Minneapolis—you will find the following bit of discussion by Dr. Jabez North Jackson—who is a past president of the A. M. A. He said: "I think, fundamentally, the whole trouble exists in the fact that the A. M. A. has been somewhat asleep on its job in the past and has permitted other organizations to step in and assume control of hospitals instead of the A. M. A. itself dictating the policy of hospitals. I am impressed with the report yesterday of the chairman of Medical Education and Hospitals in the fact that the A. M. A. Council is now starting out to make an A. M. A. classification of hospitals and lay down rules and regulations by the A. M. A. instead of any other outstanding organization." (Applause.)

I have read the minutes of the Minneapolis meeting of the House of Delegates—through and through—and, if I am not greatly mistaken, the foregoing remarks were the only ones which received applause. They deserved an encore.

So it is more than possible that the country doctor, the country surgeon and the country hospital are really going to have their day in court.

That is all we have ever asked for and that is all that we are asking now.

This letter to you is not a case of special pleading; nor have I any ax to grind. I should not presume to write it did I not feel that I am, in at least a very feeble way, speaking the mind of a host of other country physicians and surgeons. If I know my own heart, my only motive is to be of some assistance in bringing the members of our profession together upon a plane of mutual confidence and understanding, and to seek relief from the implications of what seems to me to be a very unjust, unwise and "class-legislating" law.

Frankly—I am a fee splitter. (I prefer to call it a fee sharer.) My father was one before me. The group of which I am a member (there are six of us) are all fee sharers. Our senior partner—Dr. W. T. Sarles—now retired by reason of illness—was a fee sharer throughout his professional life. For fifteen years he represented our State Society as a member of the Board of Trustees of the A. M. A. I have said it before and I repeat it; that there has probably never been a trustee who has been able to interpret the country physician and the country surgeon to the A. M. A. Board of Trustees with such sympathy and understanding as did Dr. Sarles during the fifteen years of his notable service.

Not only is our group a group of fee sharers, but other groups who practice surgery in our local hospital are fee sharers—in practically the same manner as are we.

The following is an authentic example of our method of co-operation with physicians who bring their surgical cases to us. I have already submitted this illustration to the American College of Surgeons; to the Judicial Council of the A. M. A.; to the President of our State Medical Society; and to the councilor body of our State Society. I think you would be tremendously interested in their comments and conclusions. Time and space will not permit their presentation here.

Illustration: Dr. M— of N—, a small town of 850, without any hospital facilities, brings to us a case of prostatic hypertrophy. (This patient happens to be a friend of my early "base-ball" days.) His home doctor who brings him to us is a graduate of the University of Wisconsin and of Rush Medical College.

In addition to that he has served an interneship in one of the largest and best hospitals of the state. During that time he has assisted many excellent surgeons many times. Probably—because he had no means to locate in a town large enough to support a good hospital—he located in this small town and is there serving the community according to his best training and the finest traditions of the profession. He is an honor to his community and he is, in turn, honored by it. He has been treating this patient for several weeks in preparation for his prostatectomy.

After ten more days of preparation in our hospital Dr. M— and I operate this case together; in fact Dr. M— is the only assistant in the case. The patient gets well and goes home. Before the operation I explain to him that I would like to have his home Doctor assist me and that the operative fee will be exactly what it would have been had he come to me alone; and that I will share my customary fee with his home Doctor who will assist me. He is entirely agreeable to that. The operative fee is set at $150.00 and the patient is agreeable to that also. Six years have passed since that event and our books will show that this patient has only been able to pay $50.00 on his account. This is probably all he ever *can* pay, for he has met with much adversity. I am not ashamed to say that our books will show—also—that we have sent, by check, one-half of that payment to Dr. M—, the home Doctor.

Admittedly—in this case—each has divided his fee and each has shared his fee.

Let me elaborate a bit: Every letter and implication of the A. M. A. Code of Ethics has been scrupulously followed in this whole transaction. The patient has been fully informed as to the terms of the transaction. He has approved of them. No commission has been given none has been taken. There has not been the slightest secrecy about it. The home Doctor has had a responsible and self respecting place at the operating table and a reasonable part of the joint fee—for it. We have shared our customary fee with a neighboring Doctor who is honest and capable but without hospital advantages in his home town. We have shared our hospital privileges and opportunities with a worthy young physician who has had excellent surgical training but who has no hospital in his home town wherein he may develop his talents in surgery. The patient has had the services of two at the same cost that he, otherwise, would have had to pay for the services of one. Our hospital is thirty miles nearer to this patient and his home Doctor than any other open hospital. Our hospital has no interne and so any outside surgeon bringing a case to it must seek assistance from some of the local surgeons.

Have Dr. M— and I broken faith with our patient; or the public; or with our profession? I think not. Have we broken the rules of ethics laid down for us by the A. M. A. covering this subject? We have not; either in letter or spirit. Have Dr. M— and I followed the plain implications of the Golden Rule in this case? *I know* we have. Whatever may be the standing of the Golden Rule elsewhere it is still considered "good form" out here in the country.

In regard to the case just cited and our manner of co-operating in it, I would be happy indeed to stand before any body of unprejudiced and openminded men—either in or out of the profession—and defend it—if, indeed, it needs defense.

Does any one presume for a moment that any judge or jury of any human sympathy or understanding would convict Dr. M— and myself of criminal fraud for participating in that bit of co-operative surgery in that particular manner? And—*yet*—the plain provisions of our present fee splitting law are that both Doctor M— and I are guilty of criminal fraud—for that act of neighborly co-operation—and should be penalized by fine or imprisonment and annulment of our license to practice medicine and surgery.

I have frequently been told that the separate collection of fees in this case would have answered all the law's demands and put the whole transaction upon a plane of rugged honesty and high morals. That is to laugh! ! ! !

I have described a transaction which was intrinsically ethical in itself and no particular manner of collecting the fees concerned in it could possibly have added to or subtracted from the ethics of it.

The division of fees comes properly within the realm of ethics, but the manner and method of collecting divided fees is purely a matter of mechanics and can be and should be left to the convenience and wishes of the contracting parties—namely—the patient and the co-operating surgeons.

A fundamental question is at issue here and it is not the ques-

tion as to how you and I shall keep our books and collect our fees.

The real question is this: "By whose rules of ethics shall you and I be guided and governed; those of the American Medical Association or those of the American College of Surgeons?"

The rules of ethics as laid down by these two bodies differ as widely as the poles.

The A. M. A. Judicial Council has been repeatedly importuned, by the College of Surgeons, to change their rule of ethics and condemn the *open* division of fees and this the Council has steadfastly refused to do. Bearing out the truth of this statement let me quote from a letter by Dr. G. E. Follansbee—Chairman of the Judicial Council—A. M. A.—under date of Nov. 14, 1928: He writes: "I do not believe the Judicial Council is now or ever will be prepared to change their section on commissions and fee splitting to make it correspond with the oath of the American College of Surgeons."

Now let us take a long look into the future. In the year 1927 ninety-six per cent of all medical graduates were from Class A medical colleges. From this time, on, practically every doctor who locates in this or any other small town or hamlet will be a Class A man. He will have had an excellent interneship and will have assisted far better surgeons than I can ever hope to be. He will be prepared, at least, to assist in the surgical work which develops in his practice and he will be ambitious and he should be ambitious to express himself along that line. If I correctly appraise the far-sighted wisdom and statesmanship; the warm and comprehensive sympathy of the A. M. A. Judicial Council—they will be slow to make any new rules of ethics or any re-interpretations of old rules which will deny to these fine young men on our frontiers the fullest opportunity to develop their surgical talents.

Now what about our much cussed and discussed state law regarding fee splitting? Did you ever have a chance to express your approval or disapproval of it before it was enacted into law? Who did? (except the Dane County Society?) It sure had a still birth, and, so far as viability is concerned, it "died abornin." In addition to Wisconsin, only thirteen states in the Union have any laws whatever relating specifically to fee-splitting and the Wisconsin law has the most drastic penalties of all. The law is fifteen years old and there has never been an arrest under it. Its progenitors have not even had the grace or grit to give it a friendly suit to see if it had any standing in court. Till now—it has not been considered worth enforcing or repealing. It is as obsolete as Section 351.46 of our statutes—which prohibits attendance at Sunday ball-games, movies, etc.

If it is obsolete—then why seek to repeal it? Because it probably does not represent the thought of even a reasonable minority of our profession and may, at any time, be invoked against surgeons and physicians whose work is being done in strict accordance with every line and precept of the A. M. A. Code of Ethics.

What shall be the policy of groups like the one with which I am associated and other surgical groups similarly situated, here and elsewhere—all over our state?

Through no merits of our own but probably because the Sisters saw that here in Sparta was an opportunity for one of their hospitals to serve a very large unhospitalized area—we Sparta physicians now have the inspiration and privilege of one of their well equipped hospitals.

We are surrounded by a group of Class A physicians who have no hospital in which to do their work and who find our Sparta hospital far more accessible to themselves and their patients than any other open hospital.

Long before the Sisters built our local hospital (13 years ago) our group and the other two groups doing surgery here—were co-operating with many of these neighbors; operating majors and minors, with them, in the homes of their patients; sometimes in homes of comfort and plenty and often in log houses and homes of the very poor. Our plan of work then was practically the same as that which we now follow. No one ever dreamed that those acts of neighborly co-operation would some day be branded by law as criminal misdemeanors. We were simply following out the implications of that basic law of country life—neighborliness. And it was—admittedly—to the mutual advantage of all concerned.

But times have changed. Our group and two other groups—similarly situated—have now a fine hospital in which to do our work. What shall be our future policy with relation to the Class A physicians who live and labor in the unhospitalized towns and villages about us? Shall we wrap the draperies of exclusiveness, not to say of selfishness, around us and refuse to continue to co-operate with them? Shall we go into their territories and pick off their surgical cases—with the implication that they are not qualified to act as assistants in the operation of the same? Shall we do this—while they stay home and "wash the babies?" We could all afford to do that now—*But! ! ! !*—Shall we? If we do we will have to stultify every generous and neighborly impulse in us.

There comes a time to all of us when we must make difficult decisions; and those decisions will be good or bad according to the "set of our souls."

For myself—I have come to the point where I feel that I must choose between following the provisions of an obsolete law or the clear call of the Golden Rule.

With apologies to no one I choose the Golden Rule.

I think it was Rousseau who once said: "Every man goes down to his grave holding in his clutched hands only that which he has given away."

Dear Friends: Our honored profession is more than a workshop and a tool house. It is a fraternity.

Yes, it is. And we shall not fulfill our mission until we have made Rouseau's thought—our passion.

We shall not be happy or contented—either as individuals or as a great fraternity—until there is a pledge upon the part of every one of us to share our blessings with those about us; and until every brother—in city or hamlet—is given his rightful opportunity for self expression in the art of medicine and surgery.

"By mutual confidence and mutual aid—
Great deeds are done and great discoveries made.
The wise—new prudence from the wise acquire—
And one brave hero fans another's fire."

These are not the days for a "lock-stepped"—"chain-stored" standardization of the free souls of our great profession.

"Them days is gone forever."

A new type of Doctor is abroad "in the country."

He does not want to be subsidized.

He does want to be recognized! ! ! !

What are you going to do with the brother who recognizes him?

Are you going to fine him and imprison him and annul his license to practice medicine and surgery?

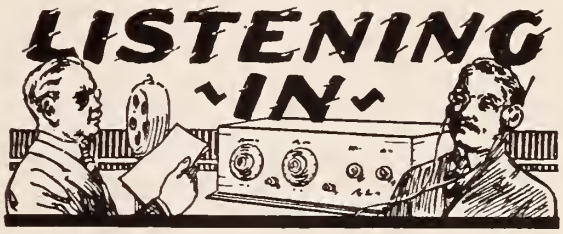
That is a basic question?

Which shall it be?

Embittering and destructive competition? *or,*

Neighborly and constructive co-operation?

Very sincerely, SPENCER D. BEEBE.



ARKANSAS PASSES BASIC LAW

Arkansas is the latest state to adopt the Basic Science Law. The law in that state will serve as the basis for subsequent licensure by any one of five existing boards.

COLORADO HAS SECRETARY

A full time Secretary-Managing Editor for Colorado has now been voted by that State Society. The Wisconsin State Dental Association is also expected to employ a full time lay secretary at its meeting in July.

COLLECTION AGENCIES AGAIN

During April and May, several members have complained of agencies that failed to report collections or

charged exorbitant rates for collections. One agency charged fifty per cent for collections paid directly to the physician. The State Society will do what it can to secure reports for physicians from delinquent agencies but the suggestion is again made to think twice before you sign. Too many contracts take a Philadelphia lawyer to decipher.

A THREAT

A member of the legislature spoke to the writer of a letter he had received not only asking his vote for a bill but concluding with an implied threat of loss of votes if he did not vote "right." While all that was said about the bill was true and the legislator agreed with the writer on his stand, he objected to the implied pressure and it took a second and third letter to clear the atmosphere.

WISCONSIN IN IDAHO

An invitation to tell Idaho members of the accomplishments of the Wisconsin members has been extended to the writer. The address is to be made at the annual banquet of the Idaho State Medical Association in July.

X-RAY FILMS

The storage of x-ray films in their paper envelopes on shelves was considered a dangerous practice by the committee of the State Society that met with the Industrial Commission during May. It was suggested that the films be stored in cardboard boxes, each containing fifty films. The box can then be placed on end on the shelf with file numbers on the end of the box. Thus the torn paper envelopes and films are not so directly exposed to fire hazard.

THANK YOU, NEW YORK

The *New York State Journal of Medicine* gives high praise to this *Journal* in a comment on the proposal of Dr. K. W. Doege, President, that this *Journal* employ a scientific editor.

"Does any journal fulfill the expectations of its editors and publishers?" asks the *New York Journal*. "If it did, physicians would be conventionalized, and the profession, fossilized.

"A medical journal reflects the imperfect application of incomplete scientific knowledge; but it also reflects a continuous progress in both the theory and practice of scientific medicine. Ideals are always far in advance of their practical application in medicine, as in the church and the law.

"The scentific department of the *Wisconsin Medical Journal* is discussed by the President of the State Society, Dr. K. W. Doege, in the April issue, as follows: * *

"The diagnosis of the Editor of the *New York State Journal of Medicine* is that efficient practice follows closely upon ideal theory in the *Wisconsin Medical Journal*. His opinion is confirmed by the length of the index of abstracts taken from the *Wisconsin Journal* during the past year."

CASE REPORTS

Short case reports for the Journal Clinic are always welcome contributions, according to the Editorial Board. The Board declares that a report of a common condition that is frequently overlooked is just as important as the report of the rare case.

Wisconsin residents are warned to disregard all "cancer cure" advertisements in a statement issued by the State Board of Health.

"There is no medicine that will cure cancer," the board stated. "Doctors and institutes that advertise 'cures without the knife' play upon the patient's fear of operations in a way that leads too often to the loss of precious time and fatal delay in seeking competent treatment. Go first to your family physician."

It was pointed out by the board that as yet no one has claimed the $100,000 which the American Society for the Control of Cancer has been offering for a year to the person who will produce a remedy that can be demonstrated to be a sure cure for cancer.

* * *

Three of Governor Kohler's platform recommendations have carried in the legislature with final action in the Goodland bill to replace the present part-time highway commission with a full-time board of three members, each to get $6,000 a year. Passage of the bill means the end of ex-officio membership on the board. Dean E. F. Turneaure, of the University engineering school, and E. F. Bean, state geologist, were the ex-officio members. All of the new members will be appointed by the governor. Other administration bills that have passed include the Goodland bill calling for a new budget director and the Fellenz bill calling for an investigation of past campaigns.

* * *

In an opinion to the joint finance committee, Attorney General John Reynolds holds that the Gettelman bill and substitute for special taxes on chain stores is unconstitutional. He holds that a law which imposes special taxes or license fees upon retail stores, basing the discrimination solely upon the number of stores conducted by the owner, is a violation of both the state and federal constitutions.

* * *

The steam roads have reported to the highway commission by letter, in advance of the regular monthly reports, 101 accidents on public crossings during this quarter, resulting in the death of 11 persons and injuries to 44 persons; 95 of these accidents involved autos, with 10 persons killed and 43 injured. In addition, they have reported by letter a total of 166 accidents other than crossing accidents during the quarter, resulting in 16 fatalities and 115 injuries. Of these casualties trespassers furnished 8 killed and 6 injured.

* * *

The Industrial Commission has made a compilation of the number of injuries settled under compensation for 1928, of which there were 21,818, an increase of 1,345 over 1927, and a decrease of 359 as compared with 1926.

There has just been published by the Industrial Commission a tabulation of eye injuries settled under compensation during the years 1924 to 1927, inclusive, showing that there were 2,767 such cases, of which 127 caused the enucleation of one eye, and 575 caused permanent disability to one eye. The compensation paid amounted to $1,266,450 and medical aid to $250,000. Practically all of these injuries could have been prevented by suitable eye protection and a large number of them occurred in those industries where such protection would be reasonable.

* * *

The state committee on water pollution has adopted definite cooperative activities to be carried out by Wisconsin industries and this division in the utilization or satisfactory disposal of wastes from pulp and paper mills, canneries and milk product plants. The program includes stream surveys and interstate pollution control problems, which are continuations or extensions of the work during the past year. A report covering the progress in stream pollution activities for the period January 1, 1927, to January 1, 1929, is now being prepared for publication, and will be made available at an early date.

* * *

The legislative finance committee is about to report its complete recommendations to the two houses and is now at work trying to cut down departmental demands by about $10,000,000, the amount it estimates departments want over the expected state receipts.

Chairman H. E. Boldt, Sheboygan Falls, of the committee, pointed out that departments who depend for support on general taxation are demanding $10,000,000 more than the total state revenue, and he declares that many meritorious projects must die simply because there is not enough money to go around. Nobody wants an increase in taxes, he says, and there is no way of filling all demands without a material tax boost. Besides this problem, Senator Boldt points out, there are many special bills with their own tax raising provisions which must also be accounted for if taxes are to be kept down.

* * *

Wisconsin will probably see a three-cent gasoline tax before the present session of the legislature ends. Governor Kohler worked out a highway plan where revenues for various activities would continue to get the same amounts they now do with the natural increase in revenue to go for through roads and snow removal. But sentiment is so strong for a gas tax boost in the legislature that some increase seems certain. Governor Kohler has announced he is open-minded on the gas tax question, indicating that he would sign a bill for an increase. About fifty members of the assembly called on the governor and insisted that gas taxes be raised at this session.

* * *

Floating biological laboratories will be maintained on the upper Mississippi River this summer by the United States bureau of fisheries to investigate and study fish propagation.

The floating laboratories are housed in river houseboats fully equipped with the necessary experimentation apparatus and light plants, according to Capt. C. F. Culler, superintendent of the fisheries department for the Mississippi River valley region, with headquarters at La Crosse.

* * *

Counties would be made a unit for stringent drives on noxious weeds under the terms of a substitute bill offered in the senate by a committee. A county would have an option to come under the law, but if it did it would follow definite uniform procedure. There would be a weed commissioner appointed for the county, with the power of deputy sheriff, and he and his assistants would remove weeds where an owner was convicted of failing to have them removed. The bill calls for fines and imprisonment up to $100 and six months in jail.

* * *

The present session of the legislature is following closely the precedent of other sessions for the amount of time taken in lawmaking. A month ago there were many legislators hopeful for adjournment in June. These same legislators are now hoping for adjournment in July, but the general opinion around the state house now is that the lawmakers will be at work until some time in August.

* * *

Wisconsin's 431 busses contribute nearly a half million dollars a year to the state in five special taxes, with many of these lines contributing also to municipalities where they have also set up special taxes on these vehicles.

A bus pays five taxes to the state. First it pays a license fee, then a $40 fee to the railroad commission, then a ton mile tax, a personal property tax, and a gasoline tax. Taxes individual busses pay vary, but the average payment to the state is nearly $1,000.

* * *

Wisconsin farmers who sell their milk to the Chicago market lost their fight in the senate to have the Chicago inspectors licensed by the state. Farmers contend that the inspectors discriminate against them and that they find themselves barred from the Chicago market if they engage in activities considered detrimental to the Chicago milk buyers.

* * *

The Gettelman resolution to place a memorial tablet to the late Senator Robert M. La Follette in the state capitol was adopted in both houses without a dissenting vote. The tablet is to be paid for by popular subscription. It will be the first permanent marker for the senator in the state capitol, although his statue is in the Hall of Fame at Washington.

* * *

The Wisconsin legislature has nearly 500 registered lobbyists pushing and pulling on various proposed laws before the two houses. Besides these "legislative counsels" there are many who try to influence legislation by talking to members in the hotels and who are not registered.

* * *

A $577,000 mechanical engineering building and a $386,000 field house are the latest items in the University of Wisconsin building program which have been approved by the board of regents. Plans for the structures, which were designed in the office of Arthur Peabody, state

architect, were present at a recent meeting of the regents after Athletic Director George Little had explained the field house plans.

* * *

Sheboygan County has a mutual insurance company organized to cover tuberculosis in cattle. By means of this organization farmers are able to protect themselves against excessive loss through having reactor cattle.

The federal and state indemnities paid cover only one-half the difference between the appraised value and salvage and then not to exceed $40 on grades and $90 on purebreds. The insurance company paid the same amount as that paid by the combined state and federal indemnities, which meant that members would usually get full value for their reactors and thus be able to replace their loss.

* * *

Wisconsin is seeing its first appearances of June bugs that promise to be numerous within a short time, but the fact that these beetles are at large means that crops will have a respite this year from the ravages of grub worms, according to the state department of entomology. The beetles will lay their eggs this summer and next year the grubs will be numerous with extensive injury to growing things.

* * *

Green and Iowa are the only remaining counties that have not asked for a state bovine tuberculosis test and it is believed that Green County now has enough signers to legally petition for this work. A new law has been enacted at this session which requires a county to have over 50 per cent sign a petition in place of the old requirement of more than 60 per cent.

* * *

Law violators will be able to pay their fines in installments under the terms of the Severson bill, which has passed the senate and is being advanced in the lower house. Supporters of the bill contend that it is better to let a person pay fines in installments than to force him to serve a term in jail.

* * *

While men on the "Ag" campus farms are getting in their spring plowing and the common house variety of gardeners the country over are paging through seed catalogues, another sort of agricultural activity is getting under way at the state university on a 33-acre plot known as the Wisconsin pharmaceutical gardens, where 150 species of medicinal plants are under cultivation.

All plants in the garden, which include such species as poppy, peppermint, catnip, belladonna, and digitalis, are in good condition, suffering practically no winter kill, reports Dr. W. O. Richtmann, in charge of the gardens. Of the 33 acres in the plot, seven and a half are under cultivation this year.

* * *

The legislative committee on highways has recommended a speed limit on Wisconsin roads of 45 miles an hour. The present law has been interpreted as setting no speed limit on country roads. This limit is contained in a bill that would set up a standard traffic code, governing in all sections of the state instead of leaving localities to set up their own regulations.

New Million Dollar Memorial Union Building on University Campus to House September Annual Meeting of State Medical Society

Every event on the extensive program for the 88th Annual Meeting of the State Medical Society of Wisconsin to be held at Madison will be housed in the new Memorial Union Building on the lower campus of the University of Wisconsin. The building is less than a mile from the Capitol and just a block from the street car lines. Luncheons will be served in the building at noon for the convenience of the members and the Union will house the scientific meetings, the exhibits, the smoker, the annual dinner and the alumni luncheons.

The meeting dates will be Wednesday, Thursday and Friday, September 11th, 12th and 13th. These dates are in the week prior to the opening of the University so that the entire building can be devoted to the State Society sessions.

Round Table discussions on Thursday and Friday mornings of the meeting week, will be an innovation for this 88th Session according to Dr. W. G. Sexton, Chairman of the Committee on Scientific Work.

"We feel that our annual meeting has always been exceptionally good," said Dr. Sexton, "but we are making a very radical change this year in hopes that our plan will be of benefit to all members of the Society. All of the subjects that are to be presented are primarily for the benefit of the general practitioner, in that diagnosis and treatment of every day diseases will be stressed by all of the speakers.

"We are striving to develop more discussion of our important problems. To do this we intend to hold sessions on the second and third mornings in six different rooms in the same building at the same time. This is not to be considered a sectional meeting or a series of symposiums. Let us call them Round Table discussions or dry clinics. We shall divide the morning time into two periods so that two subjects may be presented in each room each morning. This will allow for an hour and a quarter for a thorough presentation and discussion of each paper. All members of the Society are encouraged to ask questions and to enter into the conferences. By selecting topics of interest to the

Memorial Union Building, Madison, which is to be devoted to the 88th Anniversary Meeting in September

individual physician we should have a most interesting meeting. The afternoon gatherings and the first morning session will be arranged the same as our other meetings in years past.

"The annual oration in surgery," states Dr. Sexton, "will be presented by Dr. George Heuer, Professor of Surgery at Cincinnati. His address is to be on 'Heliotherapy in Medicine and Surgery.' A second outstanding address will be by Dr. Joseph Barcroft, Professor of Physiology, University of Cambridge, England."

Other subjects which are announced for the meeting include Diabetes, Hematuria, Fat Embolism, Thyroid Disease, Spinal Anesthesia, Massive Atelectasis of the Lungs, Anaemias, Bronchoscopy, X-Ray, Diagnosis of Duodenal Ulcer, Oxygen Treatment of Pneumonia and Cardiac Decompensation. The preliminary program for each day will be published in the next issue of the Journal.

While exhibit space for the meeting has been opened but for three weeks, all but two booths are now sold. Exhibitors will include:

Burdick Company, Milton.

Deshell Laboratories, Chicago.

Dry Milk Company, New York.

Hanovia Chemical and Mfg. Co., Newark, N. J.

E. H. Karrer and Company, Milwaukee and Madison.

Kremers-Urban Company, Milwaukee.

Mead-Johnson and Company, Evansville, Ind.

Medical Protective Company, Chicago.

Mellin's Food Company, Boston, Mass.

Victor Mueller Company, Chicago.

Roemer Drug Company, Milwaukee.

Spencer Lens Company, Chicago.

E. R. Squibb and Sons, New York.

Saunders Company, Philadelphia.

Victor X-Ray Corp., Chicago, Milwaukee.

Abbott Laboratories, North Chicago.

Horlick's Malted Milk Corp., Racine.

Appropriation Bill Passes Assembly 61-5 and Reported Favorably in Senate; Bill to Open Privileged Testimony Killed in Assembly

With the unanimous favorable reports of the Assembly Committee on Public Welfare and the Joint Committee on Finance, the Assembly passed the Mulder bill 247-A with but five adverse votes. This measure would appropriate $5,000 annually to the State Board of Medical Examiners for the two-year period to permit the Board to employ a full time investigator to weed out forms of quackery in the state.

The measure was before the Senate Committee on Education and Public Welfare on May 22nd, and again received a favorable report, Senators Goodland, Racine; P. J. Smith, Eau Claire, and Teasdale of Sparta voting for the bill with Senators Gettelman and Hunt absent. The bill will come before the Senate on the question of advancement and concurrence the last week in May and the first week in June. It now appears probable that the bill will be approved in the upper house and go to the Governor the second week in June.

When the bill came up for final passage in the Assembly, no discussion was had and the roll call showed sixty-one voting favorably and but five adversely.

After passing the Senate by a vote of 16 to 4, a bill to open the present section defining privileged communications of physicians was defeated in the Assembly with an adverse report by the Assembly Committee on Judiciary. This measure was introduced at the request of the circuit judges of the state and was opposed by the State Medical Society.

The bill would have required physicians to testify against the patient's desire in court actions when the question of mental capacity was raised. Former State Senator Harry Sauthoff, Madison, and Secretary Crownhart appeared for the State Society opposing this measure. It was pointed out that a clever attorney might raise the question of mental capacity in almost any action and thus drag into court the testimony of the family physician.

"It must be remembered," declared Mr. Crownhart, "that this section is the privilege of the patient and not of the physician. Professional ethics seal the lips of the physician concerning all the socially questionable conditions he may find and of which he many times must know, if he is to secure the best possible results. In the courtroom, however, in the absence of the statute protecting his patient, the physician might be compelled to blurt out before a crowd of morbid curiosity-seekers and have broadcasted through the press the most intimate facts of his patients' lives.

"'Truth, like all other good things," declared Lord Eldon of England, "may be lived unwisely, may be pursued too keenly, may cost too much. And surely the meanness and the mischief of prying into a man's confidential consultations with his adviser, the general evil of infusing reserve and dissimulation, uneasiness and suspicion and fear, into those communications which must take place, and which, unless in a condition of perfect security, must take place uselessly or worse, are too great a price to pay for truth itself'."

Senator Sauthoff, counsel for the Society, declared that when the legislature was ready to abolish like statutes referring to the priest and the attorney, then would the physician stand aside.

"Place yourself in the position of the physician," said Mr. Sauthoff, "and consider that you have been called into this room as a court room. You hold in your possession as a sacred trust a revelation that would break up a happy family. Would you testify to that fact? To perjure yourself is unthinkable. To testify is unthinkable. For myself, I would prefer to go to jail for contempt of court.

"Physicians have already said that they are ready to testify in cases of murder where their information bears on the fact; in cases where their patient is willing, and in cases which concern commitment of the insane—dangerous persons to a community. But here we have no public danger involved—only the civil rights of one as opposed to another. If those questions cannot be determined without dragging the innermost secrets of life from the family physician, does not the public interest which brought forth this section overshadow any public interest involved in ascertaining the exact civil right of private litigants?"

STATE PERMITS REPEALED

Governor Kohler has signed the bill repealing the state prohibition law. While part of the old law was not affected by this measure, the new law will do away with the necessity of state permits for physicians. The law becomes effective on July first next.

CHARTER LAW PASSES

Without opposition the McDowell bill to bring to date the provisions of the Territorial Charter of 1841 of the State Medical Society of Wisconsin, has now passed both Assembly and Senate. The bill is pending before the Governor as this issue goes to press. A like measure to enable the Society to perfect its Endowment Fund is pending in the Assembly.

Optometrists secured the first advancement of their Assembly bill to regulate the sale of glasses, on May 23rd. The bill provides that glasses for the correction of vision shall not be sold except upon prescription of a physician or optometrist and would affect the sale of glasses in ten-cent stores and by self-testing machines. The measure is modeled after the New York law which was held constitutional by the United States Supreme Court two months ago.

Coordination of Research

(Continued from page 269)

as a nucleus the Hygienic Laboratory already in existence. This Institute would be under the control of the Surgeon General of the United States Public Health Service, and its purpose would be pure scientific research relating to the cause and prevention of diseases. The bill has been approved by the Senate Committee on Commerce. According to the report of this committee, "the plan of the institute is to make of it a great coöperative scientific organization in which leading experts in every branch of science will be brought together and given opportunity to work in unison for the purpose of discovering all the natural laws governing human life, and especially to learn those variations of such laws which are detrimental to human health." It is difficult to overestimate the importance of this bill, and if such an institute is established, it might prove to be the best agency for correlating the research in health done throughout America.

For best results, however, it would not be sufficient to organize only a national institute of health. Every state should, then, have a state institution of the same type for the express purpose of coöperating with the national unit. Bureaus of research might be organized within the already-established departments of health.

The duties of the county health officer, now so ardently urged as a means of bringing together all the health activities within his district, could be increased to add this function; or it might be assigned to the largest hospital in a given territory. The service of the local health institute necessarily would consist largely in collecting and reporting the individual research and clinical experience of the practicing physicians and the hospitals within its scope. Nevertheless, this service must not be underestimated. Large amounts of important data could be collected by such agencies, and when brought together, classified, and analyzed by the central correlating officers, would provide information not available from any other source. This would give an impetus to individual research which it now lacks.

The second possibility would be the utilization of the organizations established by the large health foundations to correlate the activities of research workers throughout the country. This would necessitate, however, the building up of local coöperating agencies, and would mean the development of an entirely new system of national scope. Since such national organizations are already in existence, it would seem best that the foundations limit their activities to those already undertaken. It is doubtful, also, whether it would be advisable for the correlating agency itself to do research work. It would perhaps be most successful by confining itself strictly to the work of organization, direction, correlation, interpretation, and dissemination.

A third possibility would be a new organzation, with county and state branches converging into a national headquarters. Something of the kind has recently been started in the cancer work by the appointment of a National Cancer Committee with members in all parts of the country, with the coöperation of Drs. Charles H. Mayo and H. N. Bundesen, and others prominent in the profession. This method would be open to the same criticism as the utilization of the health foundations—only more so—that it would necessitate establishing another complete organization.

There is one far-reaching national organization, already thoroughly established, and made up of those who are most interested in the problem of health—the county, state, and national medical associations. There is no class of citizens so vitally concerned in research into the normal and abnormal functioning of the human body as physicians. Many of the research workers are members of this organization. Most of the research is

(Continued on page XXIV)

THE JOURNAL BOOK SHELF

Bronchial Asthma. Its Diagnosis and Treatment. By Harry L. Alexander, M. D., associate professor of medicine in the Washington University Medical School, St. Louis, Mo. Illustrated. Price $2.25 net. Lea & Febinger, Philadelphia.

Acute Infectious Diseases. By Jay Frank Schamberg, M. D., professor of dermatology and syphilology in the Graduate School of Medicine, U. of Penn., and Jobn A. Kolmer, M. D., professor of pathology and bacteriology in the Graduate School of Medicine, of the U. of Penn. Second edition, thoroughly revised. Illustrated with 161 engravings and 27 full-page plates. Price $10.00 net. Lea & Febiger, Pbiladelphia, 1928.

Pediatrics for the General Practitioner. By Harry Monroe McClanahan, M. D., professor of pediatrics emeritus, University of Nebraska. Two bundred and thirty illustrations. Price $6.00. J. B. Lippincott Co., Philadelphia and London.

History of Medicine, Witb Medical Chronology. Suggestions for study and bibliographic data by Fielding H. Garrison, M. D., Lt. Colonel, Medical Corps, U. S. Army, Surgeon-General's Office, Washington, D. C. Fourth edition, revised and enlarged. Octavo of 996 pages, with 286 portraits and other illustrations. W. B. Saunders Company, Philadelpbia and London, 1929. Cloth, $12.00 net.

Blood. A study in general pbysiology. By Lawrence J. Henderson, professor of biological chemistry in Harvard University. More than 200 illustrations. Price $5.00. Yale University Press, New Haven, 1928.

Partnerships, Combinations and Antagonisms in Disease. By Edward C. B. Ibotson, M. D., Fellow Royal Society of Medicine, London. Illustrated. Price $3.50 net. F. A. Davis Company, Philadelphia.

Laboratory Manual of the Massachusetts General Hospital. By Roy R. Wheeler, M. D., and F. T. Hunter, M. D. Second edition, enlarged and thorougbly revised. Price $1.75 net. Lea & Febiger, Philadelphia.

Compend of Diseases of the Skin. By Jay Frank Schamberg, M. D., professor of dermatology and syphilology, Graduate School of Medicine, University of Pennsylvania. Eightb edition, revised and enlarged witb 127 illustrations. Price $2.00 net. P. Blakiston's Son & Co., Pbiladelpbia.

Outlines of Pathology in its historical, philosophical and scientific foundations. A guide for students and practitioners of medicine. By Horst Oertel, Strathcona professor of pathology, McGill University, Montreal. Renouf Publishing Company, McGill College Avenue, Montreal.

Thrombo-Angiitis Obliterans. Clinical physiologic, and pathologic studies. By George E. Brown, M. D., and Edgar V. Allen, M. D., Division of Medicine, Mayo Clinic, collaborating in pathology with Howard R. Maborner, M. D., Mayo Foundation, 12mo. of 219 pages with 62 illustrations. Price $3.00 net. W. B. Saunders Company, Philadelpbia and London.

The Blood Plasma in Health and Disease. By J. W. Pickering, D. Sc., lecturer on Haematology, University of London, King's College. The Macmillan Company, New York, 1928.

A Text-Book of Surgery. By W. Wayne Babcock, M. D., professor of surgery and clinical surgery in the Temple University, Philadelphia. Octavo of 1367 pages with 1,050 illustrations, 9 of them in color. Price $10.00 net. W. B. Saunders Company, Philadelphia and London, 1928.

Problems in Surgery. University of Washington Graduate Medical lectures for 1927. By George W. Crile, M. D., edited by Amy F. Rowland. Octavo volume of 171 pages, illustrated. Price $4.00 net. W. B. Saunders Company, Philadelphia and London.

Thyroxine. By Edward C. Kendall, M. S., the Mayo Foundation, Rochester, Minnesota. Price $5.50. Book Dept., Chemical Catalog Co., Inc., New York City, 1929.

BOOKS RECEIVED FOR REVIEW

Technique of Contraception. By James F. Cooper, M. D., medical director of the Birth Control Clinical Research Bureau; clinical instructor in Obstetrics, Boston University Medical School. Day-Nichols, Inc., Publishers, 15 East 40th St., New York City.

Report of Fourth International Congress of Military Medicine and Pharmacy, Warsaw, Poland, May-June, 1927. By William Seaman Bainbridge, Commander, U. S. Naval Reserve. George Banta Publishing Company, Menasha, Wis.

The Injection Treatment of Hemorrhoids. By Charles Conrad Miller, M. D., Modern Surgery Publications, Chicago, 1929.

The Writing of Medical Papers. By Maud H. Mellish-Wilson, editor of the Mayo clinic publications. Third edition, revised. 12mo. of 184 pages. Cloth, $1.50 net. W. B. Saunders Company, Philadelphia and London.

Old Age. The Major Involution. The physiology and pathology of the aging process. By Aldred Scott Warthin, M. D., professor of pathology and director of the Pathological Laboratories in the University of Michigan, Ann Arbor. With 29 illustrations. Price $3.00 net. Paul B. Hoeber, Inc., New York.

BOOK REVIEWS

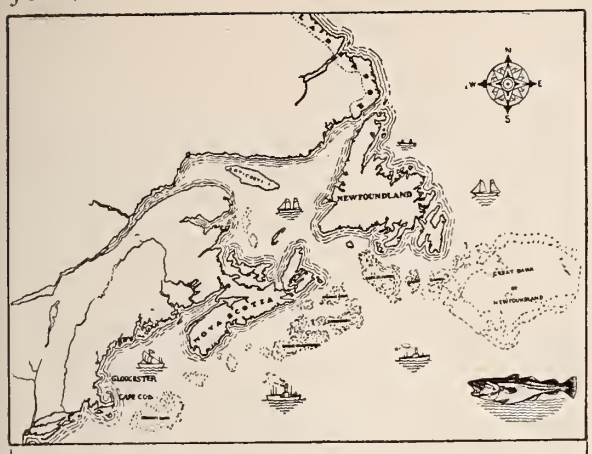
Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Secretary, Mr. J. G. Crownhart, 119 E. Washington Ave., Madison, Wisconsin. These new books will be loaned for an inspection period only.

Edema and Its Treatment. By Herman Elwyn, M. D., Assistant Visiting Physician, Gouverneur Hospital, New York. Cloth $2.50. The Macmillan Company, New York, 1929.

Diseases of the Thyroid Gland. By Arthur E. Hertzler, M. D., Surgeon to the Halstead Hospital. With a chapter on Hospital Management of Goiter Patients by Victor E. Chesky, M. D., Associate Surgeon to Halstead Hospital. Second edition, entirely rewritten. Cloth $7.50. C. V. Mosby Company, St. Louis, 1929.

The Tonsils and Adenoids and Their Diseases. Including the part they play in systemic diseases. By Irwin Moore, M. B., late honorary surgeon to the London Throat Hospital for Diseases of the Throat, Nose and Ear, Great Portland Street, and also to the Hospital for Diseases of the Throat, Golden Square, London, W. Cloth $6.50. C. V. Mosby Company, St. Louis, 1928.

Diagnostic Methods in Internal Medicine. By Samuel A. Loewenberg, M. D., Assistant Professor of Clinical Medicine, Jefferson Medical College, and Assistant physician to the Jefferson Hospital; formerly Assistant Professor of Physical Diagnosis at the Medico-Chirurgical College



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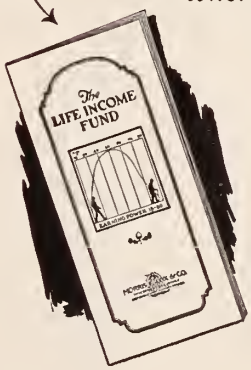

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and the University of Pennsylvania. With 547 illustrations, some in colors. Price $10.00 net. F. A. Davis, Company, Philadelphia, 1929.

Diseases and Deformities of the Spine and Thorax. By Arthur Steindler, M. D., Professor and head of the Department of Orthopedic Surgery of Iowa State University Medical School, Iowa City, Iowa, With 76 plates. Cloth $12.50. C. V. Mosby Company, St. Louis, 1929.

Physical Therapeutic Technic. By Frank Butler Granger, M. D., Late Physician-in-Chief, Department of Physical Therapeutics, Boston City Hospital; Assistant Professor of Physical Therapy, Tufts Medical School. With a foreword by William D. McFee, M. D., Boston, Mass. Octavo volume of 417 pages with 135 illustrations. Price $6.50 net. W. B. Saunders Company, Philadelphia and London, 1929.

Clinical Electrocardiograms. Their Interpretation and Significance by Fredrick A. Willius, M. D. Section on Cardiology, The Mayo Clinic, Rochester, Minn., and associate professor of Medicine, The Mayo Foundation, University of Minnesota. Quarto of 219 pages with 368 illustrations. Cloth $8.00. W. B. Saunders Company, Philadelphia and London, 1929.

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Old Age. The Major Involution. The physiology and pathology of the aging process. By Alfred Scott Warthin, M. D., professor of pathology and director of the Pathological Laboratories in the University of Michigan, Ann Arbor. With 29 illustrations. Price $3.00 net. Paul B. Hoeber, Inc., New York.

This book of Dr. Warthin's expanded from an essay given as the Wesley M. Carpenter Lecture is very entertaining reading. The author takes up the periods of life dividing them into the Period of Evolution, the Period of Maturity and the Period of Involution. After developing these major premises he has a short chapter on the Extension of the Life Limit in which he takes to task out enthusiastic life extension institute people for their highly optimistic ideas as to eventual human longevity. He thinks that if tendencies now present should keep on that the principle of life extension may ultimately defeat its own purpose.

A brief chapter on Rejuvenation demolishes for once and for all the childish ideas of those who believe that certain operations can stay the inevitable involution process in the human animal.

Finally there is a short chapter on the Philosophy of Old Age in which the author expresses some very sensible ideas. Throughout the whole book, which is not very long, one feels that the author is looking upon this whole question of old age as a physiological process for which not a great deal can be done, as inherent in every cell is the property of gradual aging. It would be well if this book were widely read.

The book making is very attractive and there are a few photographs of males from birth to old age illustrating the author's point.—L. M. W.

Technique of Contraception. By James F. Cooper, M. D., medical director of the Birth Control Clinical Research Bureau, clinical instructor in Obstetrics, Boston University Medical School. Day Nichols, Inc., Publishers, 15 40th St., New York City.

Dr. Cooper has written a very timely treatise on a much neglected, but most vital and important subject. In these 275 pages, the author has discussed the subject of contraception from practically every viewpoint. After reviewing all methods practiced by the civilized races, he has decided that the most reliable, physiological, psychological, simple, and cheap method is a combination of a diaphragm pessary and contraceptive jelly. The exact technique of applying the pessary, and the object and requirements of the jelly, with formulae, are presented in detail.

The reasons for failures with all methods of contraception are discussed. His decision that the contraceptive pessary and jelly are most effective is based on a study of thousands of women who have reported back to the clinic, or have been visited by their workers.

The last 100 pages are made up of a mass of statistics on records of birth control clinics, most of which is not of interest to the practitioner. In the last chapter Cooper has summarized the status of contraception and eugenical sterilization in relation to both the federal and individual state laws, and has printed the proposed amendment to the federal law.—R. S. C.

Angina Pectoris. By Harlow Brooks, M. D., professor of clinical medicine, New York University. Price $2.50. Harper & Bros. Publishers, New York City.

This book is not a review of the literature already published, but is a thorough study of Angina Pectoris as a syndrome. Etiology, pathology, pathologic physiology, symptomatology, differential diagnosis and detailed therapy, are fully presented in an attractive manner.

The style is simple, attractive and comprehensive. The book should prove of great interest to the cardiologist, internist and general practitioner alike.—M. F. R.

Spinal Anesthesia. Principles & Technique. By Charles H. Evans, M. D., clinical asst., New York Post Graduate Medical School and Hospital. Illust., 41, with 3 in color and 1 folding colored plate. Price $5.50 net. Paul B. Hoeber, Inc., New York City.

This book is essentially the description of the technique of spinal anesthesia as performed by the author with the various indications and contraindications for its use. The author has had a wide experience and recommends the procedure most highly.

As a guide to the administration of spinal anesthesia, which would seem to have a very definite place in surgery, the book fulfills its mission. There are a number of illustrative cuts and diagrams and several pages of references to the literature. This book can be recommended to those who are interested in this subject as a safe guide for this method of anesthesia.

We wonder why it was necessary to print the book on such thick paper with such large print and so many blank

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pages. The book could have been made a much smaller volume and not have suffered in the appearance. At the same time it might have reduced the price, which seems a little high for such a small book.—L. M. W.

THERAPEUTIC NOTES

New and Nonofficial Remedies

In addition to the articles enumerated previously the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories,
  Bismarsen.
Ciba Co., Inc.:
  Digifoline—Ciba.
    Digifoline—Ciba Liquid.
    Ampules Digifoline—Ciba Solution, 1 cc.
    Ampules Digifoline—Ciba Solution, 5 cc.
    Tablets Digifoline—Ciba.
Parke, Davis & Co.:
  Diphtheria Toxoid.
E. R. Squibb & Sons:
  Insulin—Squibb, 80 units, 10 cc.
Winthrop Chemical Co., Inc.:
  Tablets Theocin Soluble, 2½ grains.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Lenigallol.—Triacetylpyrogallol.—Lenigallol is said to be nonpoisonous and nonirritating, but it produces a mild and painless corrosive effect by the gradual liberation of pyrogallol. It is used as a substitute for pyrogallol in psoriasis, lupus, acute and subacute eczema of children and other skin diseases. E. Bilhuber, Inc., New York.

Solution Bismuth Sodium Tartrate—Searle, 1.5 per cent.—An aqueous solution containing bismuth sodium tartrate—Searle (Jour. A. M. A., June 30, 1928, p. 2103) 0.015 Gm., benzyl alcohol 0.02 Gm., and sucrose 0.25 Gm., in one cc. G. D. Searle & Co., Chicago. (Jour. A. M. A., April 6, 1929, p. 1181).

Magnesia-Mineral Oil (24) Haley.—A mixture composed of liquid petrolatum, U. S. P., 1 part by volume; magnesia magma, U. S. P., 3 parts by volume. It is used as a lubricant in the intestinal tract for promoting evacuation of the bowel and as an antacid for the gastrointestinal canal. The Haley M—O Co., Inc., Geneva, N. Y.

Sulpharsphenamine—Searle.—A brand of sulpharsphenamine—N. N. R. (New and Nonofficial Remedies, 1928, p. 81). It is supplied in 0.4 Gm., 0.5 Gm. and 0.6 Gm. ampules. G. D. Searle & Co., Chicago.

Diphtheria Toxin-Antitoxin Mixture (Diphtheria Prophylactic).—A diphtheria toxin-antitoxin mixture (New and Nonofficial Remedies, 1928, p. 366), each cc. representing 0.1 L—dose of diphtheria toxin neutralized with the required amount of antitoxin. It is marketed in packages of three 1 cc. vials, in packages of one 15 cc. vial; in packages of one 30 cc. vial, and in packages of thirty 1 cc. vials. National Drug Co., Philadelphia. (Jour. A. M. A., April 20, 1929, p. 1349).

DREAMS DO COME TRUE

The Hoffmann-LaRoche Chemical Works have secured a tract of land at Nutley, New Jersey, 12 miles from New York City, and are there erecting their new laboratories. Ground was broken with appropriate ceremonies last November and the construction work has been pushed with such vigor that it is hoped the company will be able to move from their present quarters, 19 Cliff Street, New York City, to New Jersey early in May. Dr. Emil Barell, director of the Hoffmann-La Roche activities in Europe, was present at the November ceremonies and turned the first shovelful of earth. Mr. Elmer H. Bobst, general manager of the company, made an address full of hope and faith in the growth and success of the Roche organization.

This company manufactures a large number of Council-accepted products that are advertised in the official state medical journals

Coordination of Research

(Continued from page 289)

reported in the magazines published exclusively for physicians. The medical organizations have well-developed contacts with hospitals, research laboratories, the health foundations, public health associations, and governmental agencies, as well as individual practitioners. There is no organization with potential resources quite so comprehensive as those enjoyed by the system of medical societies which forms a network covering the entire United States and its possessions. Furthermore, there is no organization with better facilities for international exchanges. Channels for this fellowship are already in existence, and need only use to develop their function to the fullest.

The medical organizations of the country owe it to themselves and to their clients to establish a protectorate in health research. Coöperation with governmental agencies, foundations, and lay organizations is not only desirable but imperative; but the initiative should arise from the medical societies. Theirs is the responsibility and theirs is the privilege. This does not mean that the medical societies must necessarily finance a large program of research work. If the machinery were provided, the financial support would be forthcoming from the many individuals interested in this type of work.

The responsibility is great and the opportunity knocks. Let the county, state, and national medical societies answer the call.

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Organic Changes in the Central Nervous System of Interest to the General Practitioner*

By GEORGE W. HALL, M. D.
Chicago

Wedged in as I am between two strictly scientific papers, renders my position the more embarrassing because of the commonplace topics which I propose to take up and discuss this afternoon.

In the first place, I believe our failure in treatment of organic disease of the central nervous system is too often dependent on our not recognizing such disease sufficiently early. To begin with, the history as given by friends and relatives is very often misleading, and, if taken at its full face value, will lead the diagnostician to place too much emphasis on unimportant things rather than properly applying and interpreting the symptoms which the case presents.

A study of the pupils will give information in an objective way, which should not be underestimated. We have been taught in the past that an Argyll-Robertson pupil always meant syphilis, but more recent investigation, through study of some of the diseases of the central nervous system, has shown this to be false. Multiple sclerosis may produce an irregular, fixed pupil or an Argyll-Robertson pupil, although not so frequently the latter. Multiple sclerosis is mentioned because the early symptoms of this disease are so frequently ophthalmological and not neurological. Failure to recognize the relation between the disease and the objective symptoms may delay the diagnosis many years. If the diagnosis is not made until the cardinal symptoms, such as nystagmus, scanning speech, intention tremor, and bladder disturbances make their appearance, much time has been wasted. The diagnosis of tabes dorsalis is now made long before the ataxic symptoms appear. Likewise, should multiple sclerosis be recognized early in its course. When a patient consults his oculist complaining of defective vision in one eye, a central scotoma, so to speak, the oculist may associate it with some sinus involvement and then refer the case to the rhinologist for an operation on the sinuses, etc. The facts are that a greater percentage of central scotoma is due to multiple sclerosis than to any other single cause. If that can be kept in mind, and if accompanied by the loss of abdominal reflexes and a positive Babinski on one side, a tripod of symptoms is present on which a diagnosis of multiple sclerosis can safely rest. Many years may intervene between the first appearance of this tripod and the development of the cardinal symptoms, much to the detriment of the patient's welfare and his chances of improvement through modern treatment.

Another disease which the recent war wished on us, as you know, namely, epidemic encephalitis: The ocular symptoms in this disease show themselves early in its course, such as an Argyll-Robertson pupil, a fixed pupil, or an unequal, irregular, sluggish pupil, along with a unilateral, cogwheel rigidity of one arm or leg. It need not be bilateral, and the rythmic tremor need not be present. Many such cases of parkinsonism may give no history of a primary onset other than ocular disturbances, such as the so-called tonic fits or ocular gyri (as described by the French) where the patient's eyes are pulled upwards and he cannot get them down for a time ranging from a few minutes to several hours. Patients suffering from pernicious anemia, associated with early spinal cord changes, may present a fixed, irregular, or sluggish pupil, the knee jerks may be diminished, sensory disturbances such as numbness of the fingers and toes may mislead one to a diagnosis of tabes, but the blood and spinal fluid will show a negative Wassermann, and, still more important, is the absence of free HCL on examination of the stomach contents, although the blood picture may not be typical of a pernicious anemia.

Another disease which should attract the interest of the general practitioner is brain tumor. Many practitioners have said they never have seen a case of brain tumor. That may be because they rely too much on the x-ray interpretations. In an

*Presented before 87th Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, Sept., 1928.

article which appeared in a recent issue of the Journal of American Medical Sciences, Cushing makes the statement that 21 percent of the cases of brain tumor do not produce a choked disc. We should remember that it is not the tumor that produces a choked disc, but the "blocking" of the outlets from the ventricles which gives rise to the papilloedema in the majority of cases. Gliomas may occupy one entire hemisphere with no change in the discs. There are certain eye symptoms (depending on the location of the tumor) that may be helpful in the diagnosis of brain tumor. The pupil and disc may be normal, but a homonymous hemianopsia may be detected by the oculist and yet never be recognized by the patient. In such cases the x-ray picture may be of assistance in making a diagnosis of tumor in the hemisphere. The pineal gland is calcified in about 50 percent of the cases; consequently, an anteroposterior view may show a shifting of the pineal gland to the side opposite to the site of the tumor, as first described by Naffizger. Rarely a patient complains of failing eyesight in one eye, accompanied by a disturbance of the sense of smell on the same side. The patient may show a change in personality or he may have headaches diagnosed as migraine attacks. Later developments lead to a diagnosis of a tumor just beneath the frontal lobe. Cushing speaks of such growths as "olfactory groove" tumors. The early symptoms of brain tumor may be a definite change in personality. Many such cases are reported in the literature, where another good man "has gone wrong"; the rich widow has run away with her chauffeur; where the preacher concludes that he has been preaching the wrong doctrine; where the business man has attacks of amnesia only to develop definite localizing symptoms of tumor several weeks or months later. One could continue indefinitely, reviewing similar cases where mental symptoms are the early symptoms, and where a definite psychosis may be present before its organic nature is detected. I am aware of the fact that you are anxious to listen to other interesting papers which are to follow, and, as the time allotted to my paper has been consumed, I will close with the realization that I have only discussed a few of the many interesting neurological problems.

Peptic Ulcer: Late Medical Management*

By RAY C. BLANKINSHIP, M. D.
Madison.

Most patients suffering from peptic ulcer get their best, if not their only individual care, during the first few weeks after the diagnosis is made. Frequent repetition, printed diet schedules, and fixed routine, have warranted this; and the eagerness with which one undertakes any new project has made this early period of treatment uniformly satisfactory and fairly successful. Later, absence of symptoms and apparent well-being, coupled with the inconvenience of strictly adhering to a prescribed routine, leads the patient into a sense of false security followed by indiscretion and relapse. It is evident, therefore, that effective, continued and prolonged treatment presents the most difficult problem in the whole scheme of medical management. I do not believe that I have ever seen an ulcer patient who gave a history of continuous medical supervision for more than eight weeks, certainly not more than six months. By this time he has either decided that he is well, and relapses into old dietary indiscretions, or that he is not improving, and seeks the advice of another physician. Several such periods of initial treatment are, therefore, not uncommon and too often these abortive attempts are later casually audited as just so many medical failures. A restatement of the part the physician plays in this delinquency is never out of place.

As a rule, consultations are too hurried and explanations too much abbreviated. Every ulcer bearing patient is entitled to as much information as his physician can give pertaining to the probable causes and the usual course of peptic ulcer. He should also know something about the relative merit of surgical versus medical treatment. A patient does not require a medical education to understand, for example, that *uncomplicated peptic ulcer* is *never surgical.* This cannot be too strongly emphasized since many enthusiastic surgeons still recommend gastro-enterostomy routinely for complicated and uncomplicated ulcer alike. If the patient would get well, he may not choose between medical treatment (months of dieting) and surgery (operation, prompt recovery and *no* dieting, but he must realize that in either case

*From the Department of Clinical Medicine, State of Wisconsin General Hospital, Madison, Wisconsin.

dietary restrictions, as well as other limitations, is imperative for many months to come. I believe all modern surgical thought is in accord with this view. An understanding, then, on the part of the patient, of the problem involved, is the first step in the medical management of peptic ulcer, and by no other method can we secure genuine cooperation so necessary for success.

The initial treatment should be marked by an adequate period of hospitalization on rigid dietary regime. During this time appropriate studies in relation to etiology can be consummated and rational corrective measures instituted. I am not in sympathy with the ambulatory method of treatment alone. Actual and perhaps necessary inaccuracies incident to such practice jeopardizes both the physician's reputation and the patient's health.

When the patient leaves the hospital, he is passing through a particularly critical period because healing, if in progress at all, is not firm, and a lapse in detailed supervision at this time, far more than at a later period, may result in a loss of all advantage previously gained. It is important, therefore, that the connecting link between the hospital service and the family physician be strengthened by more definite and minute instructions to the patient concerning his immediate daily routine. Furthermore, to avoid contradictory advice, immediate contact between the consulting and the referring physician should be established. This will avoid confusion, instill greater confidence, and give the medical advisers an opportunity to agree upon debatable points in relation to any special problems presented by the individual patient.

Printed diet lists which state mathematically what to eat and when, are oftentimes a greater menace than an aid because their routine use tends to shift responsibility from the attending physician, where it belongs, to the person who formulated the diet, usually someone who has never seen the patient. Diet is important, but it is only *one* factor and not *always* the most important one.

It is folly to try to give to all ulcer patients the same diet. Aside from individual idiosyncrasies, which must be considered whether they are actual or assumed, all patients do not require the same diet. Ulcers differ as to size, contour, location, duration, tendency to perforate, or bleed, etc. Moreover, the same type of ulcer in the same location occurring in two different patients may provoke an entirely different physiologic response, and the diet tolerated by the two patients may vary widely both as to quality and quantity.

The diet following is merely an outline intended to suggest broadly: (a) the type of foods which are needed and usually well tolerated, and (b) interval between feedings. While some of the foods mentioned may well be given earlier, the plan as a whole is not recommended for routine use until after the end of the third month. Prior to this, the feeding schedule as established in the hospital should be followed.

Ulcer Diet

Twenty minutes before breakfast:	*Grams*	*Measurement*
Strained orange juice	100	½ glass
Morning:		
Cooked cereal	100	½ cup
Coffee cream	100	½ cup
Sugar	10	2 tsp.
Toast (white)	60	2 slices
Milk	100	½ glass
Butter	20	2 pats
*		
Mid-forenoon:		
Buttermilk	200	1 glass
Crackers		2
*		
Noon:		
Soup (milk)	100	½ cup
(vegetable puree)	50	¼ cup
Chicken (white meat)	40	1 small serving
White bread	60	2 slices
Butter	30	3 pats
Lettuce (green part of leaves)	15	5 leaves
Milk	100	½ cup
Cup custard	1	1
*		
Mid-afternoon:		
Malted milk	10	2 dessert spoons
Milk	200	1 cup
Sugar	5	1 tsp.
*		
Evening:		
Egg, soft boiled	1	1
Potato, baked	50	1 small
White bread	60	2 slices
Butter	30	3 pats
Clear jelly	15	3 tsp.
Vegetable puree 3%	100	½ cup
Milk	100	½ cup
Angel food cake	25	1 slice
*		
Bedtime:		
Milk, hot	200	1 glass
*		

*If hyperacidity syndrome is present or not satisfactorily under control, give alkali at these intervals.

Totals: Protein 68, fat 141, carbohydrate 206, calories 2365.

CHANGES IN DIET

Changes in the deit as well as additions which at intervals are required should be made according to the following general principles:

1. *Adaptability.* Food prescribed must be available and hours for serving adjustable to the patient's occupation. Idiosyncracies should be sympathetically discussed, and distasteful foods omitted. As a rule, the most convenient feeding schedule is one arranged on the regular three meal basis, such as the above, thereby permitting the patient to eat with his family. Complementary feedings can then be spaced midway between breakfast and lunch, lunch and dinner, and at bedtime. This plan, in no sense a new one, seems to be more rational for ambulatory patients than an hourly or two hourly schedule.
2. *Quality and quantity.* Both are indicated in the diet outlined above, but are subject to change according to individual needs. A prolonged deficiency diet should never be permitted. Continued restriction, even though prescribed for relief of distress, may do definite harm. Moreover, there are usually better methods of combating symptoms if adequate time is given to the study of the many different direct and indirect causes. Appetite is a valuable guide and should be discussed at every opportunity. Caloric requirements must meet the occupational needs. Other things being equal, this can best be accomplished by the addition of carbohydrates or fats—the former preferred. In no case should the protein intake drop below forty-five or fifty grams daily. The upper limit will naturally depend upon the amount of physical activity advised. Excessive protein is undesirable. In some cases it is wise to make the complementary feedings altogether carbohydrate, or for convenience the order may be reversed, giving milk between meals and carbohydrates at regular feeding hours, inasmuch as gruel mixtures are usually prepared and served with greater ease at the regular meal time. Eggs, gruels, ovaltine, malted milk and dextrimaltose mixtures are used freely considering appetite, volume (not too much at one time) and the balanced ration as above suggested. Undoubtedly, as a food for ulcer patients, milk withstands criticism exceedingly well, particularly when appropriately modified and prescribed in limited quantity. It may be rendered more digestible through finer division of the curd by adding sodium citrate or orange juice. This is convenient in hospital practice and usually can be continued in the after treatment. Buttermilk, with or without the addition of cream to increase the caloric value, may, if desired, be conveniently substituted. Objections to the use of fresh fruit juices and to well cooked vegetables are, I believe, not well founded. Strained orange juice is given from the first and continued throughout the course of medical treatment. Cooked fruits with the skin and seeds eliminated can usually be served as early as the sixth week, although it is generally advisable first to establish satisfactory tolerance to vegetables and later to add fruits. Well cooked vegetables may be added after the fifth or sixth week, beginning with one serving daily and gradually increasing according to tolerance. The tips of asparagus, cauliflower tops, and creamed carrots are particularly well suited for the initial period of vegetable feeding. Ricing these foods requires added time and effort, and is altogether unnecessary if dental occlusion is satisfactory and the patient can be taught to masticate the food thoroughly. Palatable salads may be made from selected cooked vegetables and cooked fruits, and served with a lemon juice dressing, or if more calories are needed with mayonnaise. Bread should be white and when practical home baked, always one or two days old. Lightly toasted bread is not objectionable. Again, considering protein values, cream cheese or fresh cottage cheese, served sparingly, is excellent either as an addition or substitution. Broiled fresh fish and white meat of fowl are normally added in limited quantity at the end of the third month. Red meat is known to be a powerful stimulant of gastric secretion and should be withheld routinely for six months or a year. In every instance when additional food is prescribed, the quantity should be limited, and until the tolerance is satisfactorily established, not more than one serving daily permitted.
3. *Gastric contents.* From x-ray examination one can determine whether the stomach is hyperactive or whether motor tone is impaired and emptying delayed—as is usual in long standing

cases. It is also wise to discriminate between obstruction (cicatricial ulcers at or near the pylorus) and retention (which may mean only the loss of motor power). Both may show a large six-hour residue, but one is surgical and the other usually responds to medical treatment. Both conditions may be present at the same time. I am strongly in favor of controlling motor and secretory overactivity during the period of hospitalization and then restricting the routine use of the stomach tube as much as possible. Aspiration is occasionally necessary, and if symptoms arise in a patient under treatment, we usually want to know the volume of residue in the stomach when it should be empty, and the titratable free acid present. Even in the absence of symptoms, aspiration, at least every three months, is advisable. This is the only accurate method of determining the secretory function. If the fasting residue is excessive (over 150 c. c.), lessening the volume of diet is indicated; if free acid is excessive (above 20 or 25 c. c.), it should be controlled through the use of belladonna if possible, alkali if necessary. Tincture of belladonna, twenty drops three times a day, is usually safe and effective. In this dosage, however, the patient must be observed at least every three or four days. Calcium carbonate seems to be the most suitable alkali for routine use. Five to ten grains midway between all feedings will usually suffice. Large doses of alkali are inadvisable and if necessary should be considered an indication for re-examination. The presence of occult blood or lactic acid in the aspirated stomach contents usually means nothing.

4. *Bowel function.* Since laxatives, including mineral oil, are undesirable, regulation of the bowels by other means is important. Ordinarily the fruit and vegetable content of the diet, plus moderate exercise and adequate fluid intake, is sufficient. If not, glycerine suppositories, oil retention enemas, or small tap water enemas may be used. Distressing symptoms may arise from defective elimination and require differentiation from symptoms which originate in the stomach or duodenum. This distinction is readily made if sufficient time is devoted to the analysis of symptoms and to the use of other special methods of examination as indicated. Patients who do well do not have distress. If symptoms do arise, it is time to re-examine every phase of the routine life, habits, work, play, diet, sleep, bowel function, worry, etc. Naturally, specific indications are many and variable, but are always apparent on close questioning and thorough re-examination. Ulcer patients occasionally become neurotic and apprehensive, and in such cases, bromides may be used to advantage. Patients who have symptoms more or less constantly or who have recurrence of distress frequently, should never be kept on ambulatory treatment. Late treatment should be a constant endeavor to keep the patient continuously symptom free. If not rewarded by success, rehospitalization is in order.

FACTORS NOT RELATED TO DIET

1. *Disease elsewhere.* The physician should know the complete physical status of every ulcer case before undertaking treatment. Oftentimes underlying gall bladder disease, chronic appendicitis, or undiscovered focal infection will mask the clinical picture and materially influence progress. It is needless repetition to enumerate here the well known points in anatomy which may harbor focal infection. In the light of present knowledge, all foci demand intelligent consideration. Constipation alone or in association with chronic colitis, complicating ulcer, has never received merited attention. A high percentage of ulcer sufferers have a true inflammatory colitis, which is often due to ill advised dieting and the resultant catharsis. Arteriosclerosis, a common complicating factor, whether recognized or not, is frequently responsible for unsatisfactory progress. In the presence of vascular disease, supervision should be more rigid and the prognosis extremely guarded. Oral sepsis in point of neglect occupies a position comparable to constipation and colitis.
2. *Habits. Adequate sleep is imperative.* Oftentimes patients fail to do well because of insufficient rest. Tobacco, tea and coffee should be banned forever. The Eighteenth Amendment (known in every language) should be subscribed and sworn to. Exercise, not too strenuous, is desirable, always if possible in the nature of a sport. If the occupation entails physical labor, the hours should be under the immediate direction of the physician. Scrupulous bodily hygiene, usually not discussed, is always of great value.
3. *Psychotherapy.* The psychic factor in ulcer

patients is of particular importance because the stomach is such a frequent reminder, and because it is entirely under the dominating influence of the vegetative nervous system. In these days of complicated living it is difficult to find a healthy individual, not to mention the ulcer sufferer, whose life is free from some weighty responsibility or a defense mechanism of one variety or another. Prying too deeply into personal affairs is likely to do more harm than good, but through understanding a patient's grievance the physician may be able to minimize its importance or to reflect it upon the consciousness in a better light. The morale should be kept up by frequent consultation. These conferences must never be hurried and the physician should always maintain an attitude of understanding, inviting conversation about what the patient is thinking and doing, as well as what he is eating.

4. *Progress.* Naturally patients who do well are gradually permitted greater latitude both in diet and in physical activity. The physician should at all times be familiar with the secretory and motor function of the stomach. The former can only be determined accurately through aspiration of the stomach contents at a time when the stomach should be empty. The latter, and perhaps the more important, can best be observed through radiographic study. The patient should be x-rayed at least once every six months. The ulcer defect itself may never disappear even though healing is complete; at any rate hypermotility or atony in the study of progress are really of more importance than the deformity. If a patient shows gain in weight, freedom from symptoms, and if his motor and secretory functions are known to be normal, there is certainly every reason to believe that the ulcer is in the process of repair. The functional activity of the stomach should be constantly maintained at or near a normal level, because at any time with circumstances favorable, an ulcer may rapidly heal. Supervision should be continued throughout the second year, and even at the end of this period, with everything favorable, the patient should still be directed to avoid indiscretion and to lead a simple life. The use of the term *medical management* should be sharply restricted to those cases where treatment has been active, adequate, and continuous for at least two years.

CONCLUSIONS

1. The physician and surgeon as well as the patient are responsible for failure in the management of peptic ulcer.
2. Uncomplicated peptic ulcer is never surgical.
3. Treatment should be started in the hospital, where other related or unrelated diseases may best be recognized and treated, and where the functional activity of the stomach can be studied and controlled.
4. Late medical treatment means a constant endeavor to keep the patient symptom-free, and to keep the stomach in a condition favorable for healing.
5. Different patients and different ulcers require different diets.
6. Large doses of alkali and the routine use of laxatives are inadvisable.
7. More liberal diet is advocated.
8. Medical management is defined.

Endocarditis Lenta; the Preparation and Use of an Immunized Human Serum in the Treatment

By OTHO A. FIEDLER, M. D.
Sheboygan Clinic, Sheboygan

Our experience in the last five years leads us to believe that the disease entity known as subacute bacterial endocarditis is much more prevalent than was previously thought. We encountered in that period thirteen cases of the disease.

The fact that its victims are usually young adults and that it is almost invariably fatal makes the disease worthy of our most serious study. Our patients varied in age from ten to sixty-two years, with an average of twenty-eight years, two were over fifty years and two below fifteen. Females predominated; in our group there were eight females to five males.

In the thirteen cases, we recovered the streptococcus viridans from the blood in ten and the haemolytic streptococcus in three. The symptomatology in our patients was about the same. In the history, evidence of a previous endocarditis (every one of our patients) subsequent to that an invasion with an acute infection, flu or tonsillitis, then fever, secondary anaemia and enlarged spleen, very mild or no leukocytosis, kidney de-

generation and achlorhydria. About 84% showed petechia, and about 60%, in the course of the disease, had emboli of the internal organs (mostly spleen, kidney and brain.)

Prognosis is very bad, as Vaques says, "Death is the regular termination." In our series, all but one died. The recovered case was a mild infection, judging from the symptoms and course, and recovered after the event of an abscess, which occurred following the injection of an autogenous vaccine. We do not know what influence the presence of the abscess had upon the formation of antibodies but report the happening.

In the treatment of cases we tried, without any appreciable beneficial results—intravenous electrargol and mercurochrome solutions. We employed polyvalent and autogenous vaccines in both small and large doses. We tried immunogens and antistreptococcus serum alone and combined. No benefit followed intravenous urotropin or salicylates, nor did we see much improvement in the cases by the use of blood transfusions.

Most of these cases were of long duration, from four to fifteen months, so that we had ample time and opportunity to try several methods with most of them.

These generally unsatisfactory results led us to experiment in the hope that we might find something that would be helpful. We thought that a serum in the nature of an antitoxin might prove of value, so in Case No. 7 of the series, we secured and used a serum prepared by injecting streptococcus viridans (recovered from the blood of the patient) into the veins of two large Belgian hares by the following method:

Thirty-six to fourty-eight hour cultures of the germs, grows in 75% acid (Phenolphthalein) and 1% glucose bouillon were used. The cultures were heated for one or two hours at 60 degrees Centigrade and treated with a 5% phenol salt solution. Concentrates of 500,000 to 500,000,000 to a cubic centimeter were prepared. Injections, both intravenously and subcutaneously, were made on alternate days with increasing doses.

After three weeks a second series of injections were made with suspensions of living organisms, beginning with 50,000 and increasing rapidly to 100,000,000 bacteria to the dose. These later injections were given twice a week for three weeks. The first hare was then bled and the serum secured. This gave an agglutination in a one to one hundred dilution. This serum was administered to the patient intravenously in increasing doses of from 5 to 20 c. c. and resulted in what we thought was a marked improvement in the symptoms of the patient, but we did not secure negative blood cultures upon examination of the blood.

The patient showed a reduction in temperature of one to one and one half degrees, a pulse rate reduction of from ten to twenty beats. The appetite was improved, sleep was more restful, and she seemed brighter and felt better. Three weeks later we bled the second hare which yielded a more potent serum giving agglutination in a one to two hundred dilution, but unfortunately our patient was anaphylactic to the rabbit serum and reacted so severely to a test injection of one drop of the serum intradermally, that we abandoned further use of the preparation. Our patient died about one month later from cerebral embolism. Somewhat encouraged by the improvement following the serum treatment in that case we decided to prepare a human serum in our next patient, to which the patient would not give an allergic reaction.

The patient No. 9 was a boy, A. D., aged 10 years. Family and personal history were negative, except that three years earlier he had suffered a severe attack of scarlet fever complicated by acute endocarditis. After a stormy three months he recovered but retained a damaged mitral valve which showed both stenosis and insufficiency. However, he was able to carry on. He attended school, maintained his grade and indulged in some of the less violent sports. His growth and general development were about normal.

The summer of 1928, three years and two months after his illness with scarlet fever, he accompanied his parents and brother on an automobile trip to the West. On the trip the family were ill with an influenzal infection of rather mild degree. The other members of the family made rapid recoveries in three or four days, but our little patient, A. D., did not return to normal. He continued to run a low grade fever of 99 to 100 Fahrenheit, looked anaemic, was easily fatigued and lost his appetite. His heart action was more rapid and murmurs more pronounced.

We saw him about two weeks after his return. He gave a red blood count of 3,400,000 haemoglobin 75%, white blood count 9,800. Urine was negative except for a trace of albumin. Spleen was just palpable and there were petechia on the forearm. Later he developed the characteristic painful finger tips, and on two occasions gave

symptoms of splenic infarct. Blood cultures showed streptococcus viridans septicaemia.

The child was put to bed and on a diet, with hygienic and nursing care, and was given blood transfusions. The mother was of the same group and her blood was used. He had six transfusions, in the amounts of 200 to 300 cubic centimeters, at one week to ten day intervals.

While we were giving these transfusions, we attempted to produce in the father an immune serum by injecting him with a serum prepared as for the Belgian hares in the case of No. 6, except that we did not feel justified in using untreated living germs for intravenous injections. We used first suspensions treated by both heat and phenol salt solution and later those treated only by the latter. At the end of six weeks his blood serum gave an agglutination in a one to two hundred dilution.

We withdrew 500 c. c. blood from the father and prepared our serum. We began treatment with 5 c. c. quantities of the serum injected intravenously every second day and increased rapidly to 25 c. c. doses, until we had used during the course of a month about 300 c. c. of the serum. We could not establish that our serum was any more efficacious than the whole not immunized blood given by transfusion. At first our patient seemed to improve, fever was a little lower, pulse slower, appetite better and in general he seemed to improve. We believe now, however, that the treatment had little to do with this and that it was only one of those usual remissions that may occur in the course of this illness.

Our patient later developed a cerebral embolism and died after a period of illness of eight months, two months after our serum treatment.

We are reporting this experience in the hope that it may be of use to anyone who may wish to try a similar method. From our experience we believe that an effective remedy in the treatment of endocarditis lenta of the type encountered in these thirteen cases is still to be found.

In submitting this paper I wish to give credit to Dr. Frederick Eigenberger, pathologist in our laboratory, who cooperated in this work, who secured the cultures, prepared the vaccines and did the work of immunization of the parent.

Ankle Fractures With Special Reference to Treatment and Return of Function

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The treatment of fractures has not received the consideration by teachers and medical schools that its importance deserves. This is particularly true of ankle fractures which are among the most common bone injuries (40). It is evident from the results and complications observed in some cases referred to us as well as from discussions by Gibbon (17), Gilcrest (18) and others (33) (44) in current medical literature, that the fundamental principles of fracture treatments are not well understood and applied by the general practitioner and surgeon who first sees and treats the majority of these cases. As a result the period of disability is much too long and many persons are permanently handicapped for lack of a functionally useful limb. In most cases this is largely due to prolonged immobilization and failure to institute early motion and massage.

We will therefore outline, in some detail, the generally accepted method of treatment for these particular fractures (5) (18) (38) (40) with especial emphasis on massage and early passive and active motion. While it is true that all cases are different and each case must be treated individually yet certain fundamental principles will be found applicable to the great majority of cases and, if followed, uniformly good results will be obtained. The principles of treatment will be better understood after a brief consideration of the surgical anatomy and physiology of the ankle joint and a

Figure 1

classification of the different types of ankle fractures.

ANATOMY AND PHYSIOLOGY

Anatomy: The ankle joint proper is a hinge joint formed by the lower extremity of the tibia and its malleolus together with the external malleolus of the fibula which form a mortise to receive the upper convex surface of the astragalus and its two lateral facets. The astragalus in turn distributes its weight posteriorly to the os calcis and anteriorly to the scaphoid. It may be looked upon as the keystone of the arch of the foot, yet the foot moves freely beneath it.

The ankle joint is surrounded by a strong capsule; this is thickened to form very strong ligamentous bands, called the anterior, posterior and internal lateral or deltoid ligaments, and the external lateral ligament, and reinforced posteriorly by the transverse inferior tibio-fibular ligament. The internal lateral ligament passes from the internal malleolus in a radiating direction forward to the scaphoid and median surface of the calcaneus and backward to the posterior surface of the astragalus. The external lateral ligament has three distinct bands passing from the external malleolus: one goes forward to the astragalus, the middle one passes backward and downward to the calcaneus while the posterior one is attached to the posterior surface of the astragalus (39). This posterior band is less seldom ruptured than the bones to which it is attached are fractured (2). These ligaments add great stability to the foot and play an important part in ankle fractures.

Physiology: The foot moves almost entirely in an anterior-posterior plane. Dorsi-flexion is said to exist about 15 or 20 degrees beyond a right angle with the long axis of the leg, but the extent is influenced by the position of the knee, more being allowed when the knee is flexed. Plantar flexion exists to about 50 or 60 degrees beyond a right angle with the leg, that is to form an angle of 140 to 150 degrees with the line of the tibia. There is no lateral motion of the ankle proper except in extreme extension, according to Jones and Lovett (22). The lateral movements of inversion and eversion have their axis not in the ankle proper but largely in the subastragaloid joint and play a much less important part in the mechanics of the foot.

The joint is of course a weight bearing one and is very strong. It owes its stability not only to the shape of its component bones but also to the strength of its ligaments. Dislocation without fracture is therefore very rare (20).

DIAGNOSIS

The diagnosis of fracture is based on a history of some trauma, usually indirect violence, together with symptoms of pain, tenderness, swelling and impaired function. The foot is held in plantar flexion and there is commonly outward displacement of the foot. Increased mobility of the ankle is present except with isolated fracture of either

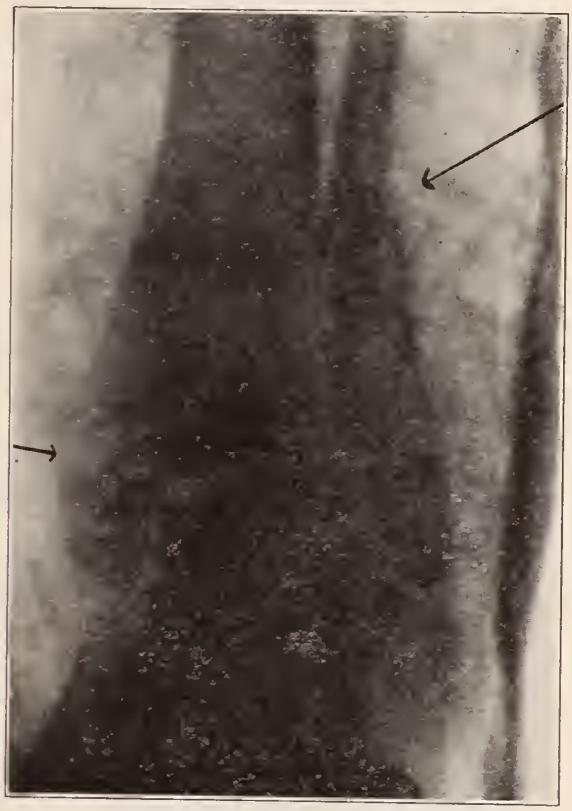

Figure 2

malleolus. If a deformity is present generally there is little question about the diagnosis even from a casual inspection. Palpation gives much information. But in all these cases two way roentgenograms should be taken immediately. One is therefore able not only to see the extent and type of fracture, but the amount of displacement and other pathology. In fact not infrequently a case is at first diagnosed as a sprain but later roentgenograms show the true nature of the injury. It has been well said that the surgeon should have an eye picture of the wound and bone injury he would treat.

CLASSIFICATION

Ankle joint fractures fall into two very distinct groups; (a) fractures of the lower ends of the

tibia and fibula and (b) fractures of the astragalus. The incidence of the first group exceeds by far that of the second (33).

Ashurst and Bromer (2), Gilcrest (18), Speed (40) and text books (38) (46) classify these fractures in various ways but for practical working purposes the following grouping has been found useful.

Fractures of Lower End of Tibia and Fibula:

1. Fractures by abduction (eversion).
2. Fractures by adduction (inversion).
3. Fractures of the articular surface of the tibia (upward thrust fracture).
4. Fractures by posterior displacement of the foot, Cotton's fracture (8). These are very common and crippling fractures. In Speed's (40) collection of 1,316 fractures, there were 208 ankle fractures.

Fractures of the Astragalus:

1. Fractures of neck of astragalus.
2. Fractures of neck of astragalus, with rotation of posterior fragment.
3. Fractures of body of astragalus.

These are very serious injuries and usually result from crushing trauma. The damage to the soft parts also is often very serious.

GENERAL PRINCIPLES OF TREATMENT

There are two important requisites in the treatment of fractures: (a) an accurate mental picture of the condition with which one has to deal; (b) a clear understanding of the pathological process associated with fractures (45). With every bony injury there is more or less damage to the soft parts, ligaments, muscles, nerves and blood vessels. Failure to take note of the injury to the soft parts accounts for many of the poor results obtained in the treatment of these cases.

The essentials of treatment may be reduced to a formula:

1. Early reduction or correction of the deformity (Setting the fracture).
2. Hold the fragments in position to grow together.
3. Massage and motion very early after reduction.

Reductions: One of the chief requisites of good healing and satisfactory function is proper reduction or correction of the deformity. In many cases however there is so little displacement of the fragments due to impaction or incomplete fracture that reduction is unnecessary. In these cases all that is necessary is to apply a splint and institute massage and motion early as will be outlined below.

Figure 3

Reduction should be done with the least possible trauma to the already injured soft parts. If a fluoroscope is available the reduction can be made under almost ideal conditions. The eye can guide the hand and no false motions need be made.

There should be no delay in reducing the fracture following the accident unless there is much swelling and bleb formation. In this case a pillow splint and cold applications may be resorted to for three to four days. The blebs are then opened under sterile conditions, dressed and reduction carried out (38). Occasionally there may be a sharp fragment of bone just beneath the skin. The fragments should be manipulated into place at once lest movements and pressure produce a compound fracture.

Immediate reduction not only stops the pain and much of the discomfort but prevents further swelling and injury to the soft parts by movement of the bone fragments. Furthermore, reduction is much easier performed soon after the accident. The corrective force should be applied gently but firmly and gradually increased until reduction is complete. When reduction is complete the usual movements of the ankle joint can be carried out. In fact this is one test for satisfactory reduction, but it must be cautiously done lest displacement recur.

More than one attempt may be necessary to obtain reduction but proper reduction is essential for the return of normal function and every effort should be made to secure perfect alignment. The ultimate result depends largely on the amount of displacement according to Speed (40).

In some cases due to interposition of tissue, great distortion, or bi-malleolar fractures with rupture of the interosseous ligament, open reduction may be necessary. In fact a good result in some of these complicated cases can only be obtained by open operation and nailing or wiring the fragments in proper position (14) (24) (27) (38) (42) (45). In general, however, a fair position by the closed method is preferable to open operation (44).

Reduction is made easier if there is good muscular relaxation. This is facilitated by knee flexion and is of great assistance in obtaining reduction. Nitrous oxide gas and oxygen is the general anaesthetic of choice. It has always given us sufficient muscle relaxation for reduction.

Nerve blocking (6) (23) (28) (32) yields excellent results if one is proficient in the technique. Because of its complete anaesthesia it gives plenty of time for reduction and application of splints. Also it affords the added advantage of cooperation by the patient. It is perhaps the ideal anaesthetic and should be used much more extensively than it is now.

Fixation of fragments (Splints). The less fixation and support employed beyond the requirements for safety the more perfect the repair (18).

Figure 4

Many cases with impacted fragments or well opposed non-impacted fragments require little fixation. Usually, however, some support for protection is advisable. If the fragments cannot be held in proper position an open reduction and fixation may be necessary.

There are several ways by which the bony fragments can be held in position but perhaps the easiest and simplest to apply as well as the most efficient in maintaining proper position, is the plaster of Paris splint. This may be used as a circular splint applied like a roller bandage directly to the part or as a posterior moulded splint.

With *simple fractures* the limb is cleansed very carefully, dusted with talcum powder and the fracture reduced. A few thin layers of cotton are placed next to the skin and the splint applied. The splint should be one-eighth to one-fourth of an inch in thickness, depending upon the amount of stress it will have to withstand. It should extend

from the toes to a point about four inches above the knee and should be moulded to hold the foot, ankle and bone fragments in the desired position. The splint is held in place by roller bandages and movements are restricted till the splint is thoroughly dried. If a circular splint is applied it should be cut longitudinally (bivalved) to permit expansion due to swelling.

In *compound fractures* extreme conservatism should characterize the treatment. If there is extensive laceration of the soft parts and comminution of the fragments amputation may be necessary, especially in older people. The wound should be thoroughly debrided and swabbed with tincture of iodin. Bleeding vessels should be ligated with catgut and all hemorrhage controlled. Adequate drainage must be provided (38). Primary suture (27) is usually not advisable. A sterile dressing is then placed over the wound and the fracture reduced. A splint is then applied as in the simple fracture. When dry a window is cut in the splint at the site of the injury so that the wound can be dressed.

In all cases after reduction and application of splints two-way roentgenograms should be taken to make sure reduction is satisfactorily maintained.

Massage and motions: Championnierre as early as 1877 treated fractures by massage and mobilization and taught that movements favor proper healing and callus formation. However, his teachings have received little attention. Early passive and active motion in the treatment of fractures have recently been advocated by Gibbon (17) and others (33) (44) while Yates (43) has emphasized the fact that fractures should be immobilized the minimum time for safety. Furthermore, Allison and Brooks (1) have shown that bones atrophy from disuse whatever the cause of the inactivity.

Massage improves the circulation (31) and through reflex action it stimulates the underlying tissues and hastens healing. Massage and motion reduce callus formation to a minimum and prevent discomfort in the limb, joint adhesions and ankylosis. They simulate nature's way in restoring useful function.

Much of the disability resulting from fractures is due to inactivity and prolonged immobilization with consequent slow healing, atrophy of muscles, stiffness of joints, etc. For in animals fractures nearly always heal with good functional results if left alone whereas when treated with splints and immobilization the results are usually poor (44).

Therefore the importance of massage and motion very early after the accident cannot be too strongly emphasized.

The technique of massage (19) is not difficult but it must be gently and properly done so that the bone fragments are not disturbed. It consists simply in very gentle stroking motions with slight pressure, in the direction of venous flow and avoiding the site of injury. It should be started as soon as the acute reaction to the traumatism has subsided, usually not later than the first week or ten days. The first seven to ten days following the accident are the most important for hyperaemia and early bone regeneration (35) (36). Leriche and Policard (26) found that ossification began during this same period, while green stick and

Figure 5

fissured fractures may be completely healed in twenty days (41).

Massage should be performed for a few minutes at least every other day until healing is complete. The entire limb from toes to thigh should be massaged. Before the leg is massaged, the splint should be carefully removed. If a circular splint has been used it may be bivalved by cutting down the sides. The limb is well supported and great care taken not to disturb the bone fragments while massage is carried out. The splint is then replaced.

Passive motion of the knee and ankle should be started not later than the second week. This can be done immediately after the massage is completed, being careful not to cause pain or disturb the bone fragments. It consists in gently moving the ankle and knee once or twice in an antero-postero direction.

At about the end of the third week *active movements* by the patient are started very gentle and slight at first and gradually increased until the full range of motion of the ankle joint is regained. The final results are not entirely satisfactory unless full range of motion is obtained.

TREATMENT OF DIFFERENT TYPES

Eversion fractures: If the lower end of the fibula alone has been broken off treatment should attempt to hold the astragalus well up against the internal malleolus and then to drag or force the external malleolus into its proper position by forced *inversion.* The foot must be dressed in extreme inversion. Over correction is far better than under correction in these cases.

Where both malleoli are broken treatment is more difficult because the astragalus is displaced either forward or backward, outward or inward. Therefore treatment should aim to return the astralagus to the weight bearing axis and then fix the malleoli so that they hold the astragalus in proper position. This can usually be done by manipulation and application of a circular cast. Sometimes, especially with rupture of the interosseous ligament and forcing upward of the talus between the fragments, open operation is necessary in order to prevent a wide, painful ankle. The Gallie beef bone screw may be used in this type of case (29).

After reduction the foot should rest at right angle with the leg and should be immobilized somewhat longer than the preceding type to allow good healing and union of the torn ligaments.

Figure 6

Pott's fracture, i. e., a fracture of the fibula two or three inches above the tip and associated with a fracture of the inner malleolus or tearing of the internal lateral ligament, is a comparatively rare condition. However, most ankle fractures are diagnosed and treated as Pott's fracture which accounts for many of the poor results. Colvin (7) found only one true Pott's fracture in a very careful study of 60 cases. Reduction is that of the outward dislocation for in addition to the broken bones ligaments have been torn by an outward drag. The astragalus is forced into place and the foot inverted and held in inversion to make sure of contact of the internal malleolus (Cases I, Figs. 1, 2).

Inversion fractures: If the internal malleolus alone is broken reduction is the reverse of that for fracture of the external malleolus. That is, the fragment is manipulated into position by eversion and the foot then dressed in its natural position if not in actual eversion (8).

Where both malleoli are broken or the tibio-fibular ligaments are ruptured with a resulting wide ankle, proper reduction is more difficult and operation with nailing of the fragments may be necessary. The foot should be dressed at a right angle with the leg and in its normal position as in eversion fractures.

Fractures of the articular surface of the tibia: Sometimes a wedge-shaped piece of compact bone is split off the tibia either anterior or posterior, starting at the joint and extending upward on the shaft for an inch or more. This fracture is caused by a wedging upward at an angle of the talus and may be associated with a fracture of the fibula. Speed (40) calls this a "lipping fracture." It is a rather rare fracture but if the fragments are not recognized and replaced, marked interference with function takes place. They should always be carefully looked for. They are replaced by hyperextension or hyperflexion as the case may be at the time the ankle is set. (Case II, Figs. 3, 4).

Fractures by posterior displacement of the foot: This is a very important and crippling type of fracture and more common than is generally supposed. The astragalus can only be displaced backwards when the external malleolus is freed from the external side of the lower end of the tibia. This means either a fracture of the external malleolus with extensive tearing of ligaments or rarely a diastasis of the tibio-fibular junction with laceration of its ligament. They are said to be produced by a combined outward twist of the foot with a forward thrust of the body weight, transmitted through the tibia (Cotton). In other words this type of fracture is a backward displacement of the foot corresponding to a Pott's or eversion fracture.

The fracture is reduced by a forward drag in moderate plantar flexion and then the foot is pushed into forced dorsal flexion and held in that position by a plaster splint. Recently Gerster (16) has reported the successful treatment of this type of case by means of suspension, using adhesive plaster to the sole and posterior aspect of the heel and allowing the natural weight of the leg to maintain reduction. (Case III, Figs. 5, 6, 7, 8).

AFTER TREATMENT

Besides massage, passive and active motion as above outlined, the after care consists in permitting the patient to be up and around on crutches after the first week. The splint is left off for one or two hours a day for a week and permanently at the end of the 5th or 6th week (15). In the average case, weight bearing is started in 8 or 9 weeks. In older people and in comminuted and compound fractures longer time, from four to twelve months, is required because healing is slower. Weight bearing should be very gentle at first and the amount of weight increased slowly until full weight bearing and walking is done. A crutch or a cane should be used when walking is first started. Sir Robert Jones in his Orthopedic Surgery of Injuries says, "The presence of tenderness over the callus at the site of fracture is a definite indication that the callus is still soft and will yield on the application of strain." There should be very little discomfort when walking is started and weight bearing should be postponed a week or two longer.

The inner side of the foot and heel of the shoe should be raised about one-quarter of an inch especially in eversion fractures. This gives comfort in walking and aids restoration of function. In some cases a steel brace as described by Cotton (8) should be used. This prevents overstrain on the newly formed callus and consequent painful ankle which sometimes results.

General measures like fresh air and sunshine, good food, etc., should not be neglected. Electrical stimulation, diathermy and baking, are also of service. Schneider (37) showed that an acid diet favored healing, but parathyroid hormone (25) has not been of value. Foci of infection should be removed and any defects in the general health should be corrected.

PROGNOSIS

The prognosis depends upon several factors: type of fracture, whether simple, comminuted or compound, amount of displacement, age and the psychic attitude of patient. Usually with little displacement, good results are obtained with intelligent treatment. In bimalleolar and comminuted fractures the prognosis is less apt to be good. Where there is a bimalleolar fracture with rupture of the tibio-fibular ligament and pronounced displacement of the talus and bone fragments, prognosis is bad at best (40).

Where manipulative treatment is unsuccessful,

open operation will sometimes improve the result.

The disability even with the best treatment is usually much too great. In any case except the slightest crack, a disability of three months is not uncommon and frequently disability lasts from six to nine months, or even longer. Cochrane (5) found that the average period of disability was 13.6 weeks and Irwin (21) in a careful review of 60 cases found that only 55 were working at the end of two years. Clough quoted by Geist (15) in 155 cases of fractured ankles showed that an average of 63 days were lost from work with simple fractures and 161 days with compound fractures. Davis (11) with his own cases showed an average time loss of 64.7 days with Pott's fracture, 37.0 with external malleoli and 56.3 with internal malleoli which is much better than the average.

This is also in agreement with the records of the Wisconsin Industrial Commission (47) which shows the time lost from work varies from six weeks to eight months, while the partial permanent disability varied from little or none to 25 to 50 per cent in bad cases. Rieger (34) reviewed 1400 fracture cases of all types and found that in most instances financial aid was necessary before the patient resumed work.

FRACTURES OF THE ASTRAGALUS

These fractures are usually caused by falling from a height and landing on a foot that is forced into extreme dorsal flexion (3). They are frequently associated with a fracture of the os calis. The result of the crushing force as such may be much more serious than any specific bone injury. Crushed feet are always serious.

Fractures of the neck: These are most common. The fracture may be simple or comminuted. The fragments should be promptly reduced to prevent dangerous pressure on the skin. Some cases become infected and an osteomyelitis which often results disables the patient for many months.

Where the fragments are badly displaced excision may be necessary. Removal of all or part of the bone gives fairly good results (3) (9).

In *fractures of the neck with rotation of the posterior fragment* usually reduction can be postponed until the swelling has subsided provided there is no dangerous skin pressure. Operation is the treatment of choice because without operation the results are uniformly bad (4) (30). If

Figure 7

the body cannot be rotated and held in position it is best to remove it.

Fractures of the body: These are frequently complicated by impaction with the os calcis. Operation is not indicated here unless loose fragments can be detected and they then should be removed (9).

Treatment: In all these astragalus fractures the foot should be dressed at a right angle to the leg and held in position by a firm plaster splint. There should be no abduction or anterior-posterior displacement. Massage should be started early but weight bearing must be postponed from four to nine months, depending upon the discomfort the patient suffers and firm union of the fragments.

The prognosis is not good. There is more or less permanent disability due to a stiff or painful ankle, especially if there has been displacement of fragments. The period of total disability varies from six months to a year or a year and a half

(4). More recently arthrodesis has been advocated by orthopedic surgeons in these cases because the period of disability is shortened and there is less discomfort.

CONCLUSIONS

Fractures about the ankle are common, and serious injuries cause not only from three to nine or more months loss of work but as much as 25 to 50 per cent permanent disability in some cases.

The disability can be reduced by:

(a) Immediate reduction and proper apposition and fixation of fragments,

(b) Massage of the entire extremity beginning not later than ten days following the accident and carried out every other day until healing is complete,

(c) Passive motion of ankle and knee after the second week,

(d) Active movements of ankle and knee after the third week,

(e) Removal of the fixation apparatus at the earliest possible time consistent with safety, usually after the fourth or fifth week,

(f) Careful regulation of weight bearing until the callus is firm and discomfort has disappeared, and

(g) Judicious use of electrical stimulation, diathermy and mechanical supports.

Figure 8

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Tumors of the Ampulla of Vater*

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Tumors originating in the ampulla of Vater are extremely uncommon. Their rarity is evident by the small number of cases (110) Outerbridge was able to collect from the literature up to 1913.

The papilla of Vater is normally only a slight thickening of one of the longitudinal folds of the duodenum, located on the inner aspect of the descending portion about three and one-half to four inches below the pylorus. At its surface there is a minute opening, no larger than the tip of a lead pencil. This is the common exit of both the bile and pancreatic juice. The common bile duct and the pancreatic duct fuse just beneath the surface of the papilla to form a sac or tube known as the ampulla of Vater. It is evident that very early in the growth of a tumor of the papilla marked changes may occur in the body of its host.

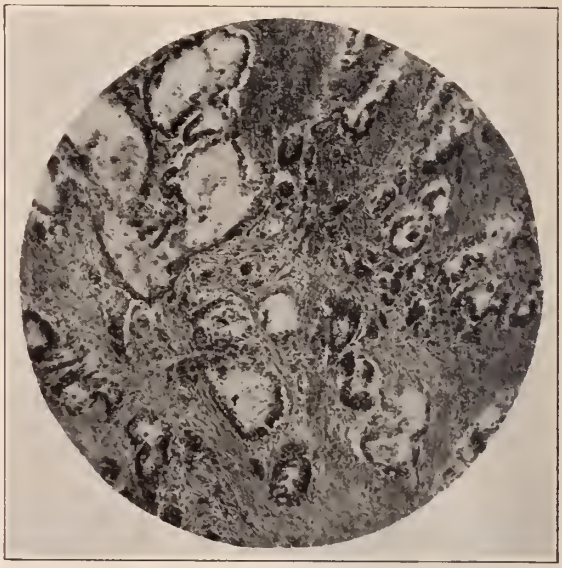
*From Department of Medicine, Marquette University. Presented before the Milwaukee Academy of Medicine, February 26, 1929.

Adenocarcinoma is the usual type of tumor found. It may arise from the epithelium of the duodenum, the bile duct or the pancreatic duct. In size these tumors vary from a pea to a small nut although some have been reported as large as an orange. Their growth is slow and metastases do not occur early. Recurrence after operation is, however, fairly common.

The obstruction of the common bile duct rapidly produces an intense and persistent jaundice. The biliary system becomes dilated, especially the extra-hepatic system including the gall bladder. The pancreatic duct likewise becomes enlarged and chronic pancreatitis may occur.

The symptoms produced are chiefly the result of the common duct occlusion. The jaundice varies little unless ulceration occurs with temporary relief of the obstruction. In the reported cases it was present from two to four months before operation. Slight epigastric distress may be complained of but severe colicky pain is usually absent unless the condition is complicated by the presence of gall stones. The obstruction of the pancreatic duct produces acholic stools containing large amounts of undigested fat. An accessory pancreatic duct, opening separately into the duodenum may, at times, be present. It may deliver sufficient pancreatic secretion to maintain digestion of the fat in the food. The absence of both bile and pancreatic secretion and, frequently, the presence of blood may be demonstrated by duodenal drainage as recommended by Crohn (2). A finding of considerable importance is the presence of an enlarged palpable gall bladder.

A pre-operative diagnosis of this condition can hardly be made and, it has rarely been made. The presence of an intense persistent jaundice usually suggests either an impacted common duct stone or carcinoma of the head of the pancreas. A stone in the common duct is accompanied by severe pain and fever. The jaundice is usually not as persistent. A carcinoma originating in the bile ducts may produce as intense and persistent a jaundice. It, however, usually occurs above the junction of the cystic and hepatic ducts and consequently produces no dilatation of the gall bladder. The pancreatic duct also is unobstructed. Carcinoma of the pancreas is not only impossible of differentiation pre-operatively but may also cause considerable difficulty during the operation. This is due to the marked hardening and fibrosis of the pancreas resulting from obstruction of the pancreatic duct.



Section of tumor mass.

An intense persistent jaundice; the presence of undigested fat in the stool, the absence of pancreatic ferments from the duodenum; the absence of fever and colicky pain and the finding of an enlarged palpable gall bladder are our chief diagnostic criteria.

The treatment of this condition is early and thorough surgical removal of the growth. The necessity of early operation is evident from the frequency with which, in the reported cases, post-operative intestinal hemorrhage has resulted in death of the patient. The disturbance in coagulation of the blood, resulting from retention of bile, has always been an obstacle to successful surgery of the obstructed biliary tract. Though no entirely successful method of overcoming this hindrance is available, a few pre-operative procedures have shown some beneficial influence.

Transfusion, at times, strikingly increases the coagulative power of the blood and at the same time increases the general defensive powers of the recipient. Walters (3) has demonstrated the value of calcium chloride intravenously in some cases of defective coagulation. The use of glucose per rectum or intravenously before operation does much to prevent the reaction which occurs from operations on the liver or its appendages, as demonstrated by Mann (4).

The operative procedure recommended by most authors and excellently described by Cohen and Colp (5) varies with the size and extent of the tumor. For the small mass localized to the papilla the so-called papillectomy, a simple excision by

the knife or cautery is advised. Where the tumor has involved the duodenal wall, a preliminary drainage operation such as a cholecystgastrostomy or a cholecystenterostomy is recommended. This is followed at an interval of three to four weeks by a circular resection of the duodenum and reimplantation of the ducts.

The operative results, as reported by Cohen and Colp and others are unsatisfactory, principally because the operation has been performed too late. Early exploratory operation on all cases of persistent obstructive jaundice is advisable. When jaundice has been present more than two months permanent damage to the liver makes any operative procedure hazardous.

CASE REPORT

A white male, age 66, entered the hospital on August 7th, 1927. The family and past history were negative. A persistent jaundice of increasing intensity was present for four months previous to entrance. The patient complained of loss of weight, pyrosis and slight diarrhoea. Physical examination revealed an intense icterus, slight tenderness and a palpable mass in the gall bladder region. The urine contained bile but no sugar. The blood examination showed a secondary anemia and the coagulation time was four and one-half minutes! X-ray examination revealed no gastrointestinal pathology. The stool was acholic. A preoperative diagnosis of obstructive jaundice, probably carcinoma of the biliary tract was made and exploration advised.

Operation was done under ethylene anesthesia. The gall bladder was markedly distended and contained a thick muco-purulent appearing fluid. This was probably the so-called white bile which has been noted by others in these cases. No stones were found in the gall bladder or ducts. The entire pancreas was enlarged and extremely hard. An operative diagnosis of carcinoma of the pancreas was made and the gall bladder was anastamosed to the bowel to provide drainage. The patient died four days post-operatively from intestinal hemorrhage.

Extract of post mortem examination by Dr. Miloslavich: Recent operative wound in right upper quadrant of abdomen. An extensive hematoma was found about the edges of the operative wound. Both lower lobes of the lungs showed evidence of hypostatic pneumonia. Numerous atheromatous patches were found on the aorta and aortic leaflets. The ascending aorta was dilated.

The abdominal cavity contained a small amount of fluid blood. A thick layer of coagulated blood covered the convexity of the liver. The liver was small and hard and of a dark green color. The intra-hepatic bile ducts were dilated.

At the site of the papilla of Vater there was a gray-white mass, the size of a hazelnut, projecting into the duodenal canal. The ampulla was completely obliterated with obstruction of the common bile and pancreatic ducts. Both ducts were markedly dilated. The pancreas was thin and hard and the intra-hepatic duct system was dilated. The

Gross specimen showing tumor at site of papilla of Vater. Gall bladder and pancreatic duct dilated.

gall bladder was sutured at its apex to the intestine. The stomach and small intestine contained fluid blood.

Anatomical Diagnosis:

Carcinoma of papilla of Vater.

Cholemic hemorrhage into the gastro-intestinal tract.

Hypostatic pneumonia.

A section through the tumor mass showed infiltration of the tissue by an adenocarcinoma. Mi-

croscopic examination of the pancreas showed an infiltration of lymphocytes in the interstitial tissue. The gall bladder wall was thin and showed atrophy of the mucous membranes.

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The Clinical Importance of Adenoids

By S. R. BOYCE, M. D.
Madison

The nodular collections of lymphoid tissue in the nasopharynx, which, by their abnormal anatomical relationships or pathological changes become responsible for certain morbid phenomena, are known in common parlance as adenoids.

When enlarged these masses encroach upon the respiratory and resonance space of the pharynx, cut down oxygen supply to the lungs, obstruct ventilation and drainage of the nasal accessory sinuses, and predispose to infections which often become chronic or recurrent throughout the life of the individual. All evidence seems to indicate that cerebrospinal meningitis, both epidemic and sporadic, gains entrance through the adenoid and ethmoid region.

The majority of middle ear infections, frequently extending to the mastoid and internal ear and sometimes causing chronic deafness or fatal intracranial complications, develop as the result of inflamed and hypertrophied adenoid tissue in the pharynx. By obstructing the breathway and interfering with reception into the lungs, enlarged adenoid masses may actually reduce the opportunity for thorough aeration of the blood. This gives rise to early fatigue, congested head, sleepy eyes, aprosexia and may be a large factor in the production of severe neuroses, such as chorea and epilepsy. Adenoids may be the focus from which infections in other parts of the body arise, as is more frequently the case with the faucial tonsils. But because of their obscure situation the adenoids may escape scrutiny in this connection.

The pharyngeal tonsil is a temporary embryonic structure, which normally undergoes atrophy about the age of puberty, and when normal does not require treatment. When diseased, it is subject to the same disorders as the faucial and lingual tonsils, only more often and at an earlier age, and because of its obscure location may not be diagnosed. When it once becomes the source of morbid symptoms, it is always a menace to the health of the individual and should be removed, not partially but thoroughly, and in such a manner that it will not recur. When partially removed, the remaining portions are usually transformed from an innocent pharyngeal tonsil to an aggressive adenoid, with adhesions to the eustachian tube and posterior ethmoids; a condition which, when once established, can never be made as good as though thoroughly done at the first sitting.

The anatomy of this region is so complex and its relations and extensions so numerous and so important, that its surgery should be undertaken only by those who have had thorough special training in ear, nose and throat work. They should have, at their command, the equipment and trained assistants to do a highly technical operation without damage to the surrounding structures, all of which contribute to the efficiency of the speaking and singing voice, as they do also to the important special senses of seeing, hearing, tasting and smelling; the loss of any one of which is a serious handicap to the individual.

More individuals in a given community suffer from some form of acute or chronic upper respiratory disease in the course of a year than from any other single ailment, and the prevalence of upper respiratory disease coupled with the necessity for exact specialized knowledge of the anatomy, pathology and physiology of the structures involved would seem to warrant the segregation of this type of work within every hospital and its control by suitably trained staff members. Both diagnosis and treatment, whether surgical or not, would benefit greatly in this field if all of this work were carried on by competent otolaryngologists, and if the surgery in this field were left entirely to men engaged in this specialty. Hospitals can aid ma-

terially in improving the end results of otolaryngological surgery by providing not only a separate operating room, but by giving this broad specialty its own complete organization in the form of a separate hospital service. In a day when over-specialization is being frowned upon by profession and laity alike, increased specialization in this particular field can be justified because of its wide scope and close inter-relationship with so many apparently remote conditions.

THE JOURNAL CLINIC

Umbilical Cord Hernia

By F. P. KNAUF, M. D.
Kiel

Hernia into the umbilical cord is a rare occurrence in the experience of the general practitioner. Various authors estimate its frequency as 1 in 2000 births, to 1 in 6000 births.

The abnormality takes the form of a soft, globular tumor of the cord at or near its abdominal attachment. The size of the tumor is dependent upon the extent to which the abdominal viscera have extruded themselves into the cord. The coverings are those of the cord itself plus the peritoneum. They may be so thin and transparent that the contents of the sac are readily recognizable.

These hernias are seldom reducible on account of the narrowing of the cord at or near the abdominal end. If, as is usual, the opening into the abdominal cavity is of small calibre, delay in surgical intervention results in intestinal obstruction or strangulation which speedily causes the death of the child.

Case I: Baby G., girl, born July 23, 1922, presented at birth a soft, round tumor of the cord, 5 cm. in diameter, 3 cm. from the umbilicus. Through the transparent coverings of the tumor the contents were recognized as bowel. Twenty hours later at Plymouth Hospital the sac was opened exposing the caecum, appendix and 10 cm. of ileum. Under local anesthesia the hernial ring was enlarged by incision, and after freeing the caecum from its adhesions to the sac the hernia was reduced and the abdominal wall repaired. Healing was uneventful.

Case II: Baby K., boy, born at Plymouth Hospital, August 27, 1928. At the moment of birth there was a spontaneous rupture of an unsuspected umbilical cord hernia of large size, causing almost the whole intestinal tract to spill out into the open. The cord, which was of enormous size (6 cm.) throughout its entire length was clamped and cut, and the child taken into the operating room. Without anesthesia the hernial ring which admitted the finger, was enlarged and the bowels were replaced into the abdomen. The abdominal wall was repaired and healing proceeded normally. At eight months the child is well.

This case is reported to draw attention to the fact that the coverings of an umbilical cord hernia are so thin that the forces of normal labor are sufficient to rupture them, creating a real surgical emergency.

Osteogenesis Imperfecta (Fragilitas Ossium)*

By P. G. McCABE, M. D., and W. C. WOJTA, M. D.
Fond du Lac

Osteogenesis imperfecta is a rare condition, probably congenital in origin, appearing most commonly in fetal life, somewhat less frequently in infancy and very rarely in childhood and adult life. The disease primarily affects the bony tissues and is characterized pathologically by a deficient and abnormal bone development and clinically by multiple spontaneous fractures of the bones of the arms, legs, and ribs.

The condition of frequent broken bones may be congenital or acquired, it may be due to developmental defects or may be of the type we see in the aged or insane, and in chronic wasting diseases where there is a general absorption of the mineral constituents of the bone. It is the idiopathic type of bone fragility which we are particularly interested in, and this case falls under one of the three conditions.

(1) Osteogenesis imperfectus, first described by

*Records of St. Agnes Hospital.

Vvolik in 1849. Here we have defective development of the cranium and frequent broken bones. It is a disease of the fetus, and fractures are often found at birth which may have united with large callus formation. If the child does not die in early life, the bones tend to become less brittle and fracture less frequently. This condition is not known to be hereditary.

(2) Osteopsathyrosis, first described by Lobstein in 1833. In this condition, there are many idiopathic fractures in young adults following slight trauma. It is held by many men that this disease is but a delayed manifestation of osteogenesis imperfecta, but in all probability this is not the case. It occurs in children and young adults who were apparently normal at birth. It is similar in many respects, pathologically, to the third condition which we are to describe, but it is not associated with blue sclera and is not hereditary.

(3) The syndrome of brittle bones and blue sclera. Blue sclera was first described by Von-Ammon in 1839. Many of those who have blue sclera show also frequent broken bones, hereditary deafness, and hypermobility of the joints. In 1926, a summary by Keyes, showed a series of twenty-one families; of 477 individuals; of these 241 had blue sclera and of these having blue sclera 146 had fractures and 56 were deaf to a more or less extent. The condition is transmitted only by affected parents to their children and in Keyes' summary, was found to be more often transmitted by female than males. Children with normal sclera born of affected parents, will have normal children and those born with white sclera never suffer from brittle bones. Deafness occurs in later life and was not described as part of the syndrome until 1917. Deafness has been thought to be due to an abnormal deposit of calcium salts in the ear. In the eye there is an abnormal transparency of the sclera with probable decrease in its thickness, which permits the blue area to shine through, thus giving the peculiar blue appearance.

The calcium and phosphorous content of both blood and bone has been, in most cases, reported normal.

REPORT OF CASE

A full term female infant was delivered at St. Agnes Hospital January 5, 1929. The entire puerperium and delivery were normal in every respect. Mother is a para 2, first child age 3 years living and well, no anomalies.

The patient was a normal full term baby, weighing 6 lbs. and 6 oz. at time of birth, and 17 inches in length. At time of delivery an excessive mobility of the legs and arms was noticed. Upon careful examination, it was also found that the cranium was almost entirely devoid of calcification, being soft and pliable, a condition known as calvaria membranacea. An x-ray picture was taken which revealed multiple fractures of the extremities, in various stages of callus formation. The bones of the skull were devoid of calcification, as can be seen Fig. I. The face is small, the nose and mouth perfectly formed, and the tongue is not enlarged. The skin is soft and delicate. The thorax shows no deformities excepting small knoblike excrescences on the ribs, due to old intra-uterine fractures. The abdomen is protuberant, without any evidence of umbilical hernia or diastasis recti. The extremities are bowed due to fractures and bending.

The sclera is blue and pupils are large, which react to light. Infant is apparently not deaf, and the cry has always been feeble. The infant seldom

moves unless disturbed. Blood Analysis: Leucocytes 7,800. Red blood cells 3,750,000. Hemoglobin 88%. Differential count. Polymorphoneucleus 50%. Eosinophilia 7%. Lymphocytes 37%. Endotheliocytes 6%. Wassermann and von Pirquet tuberculin test were negative.

At three months of age the infant weighed 8 lbs. 11 oz., and slept most of the time. The temperature varied from 99.8 to 103. Babe was fed on lactic acid milk.

TREATMENT

No satisfactory reports of treatment are to be found in the literature. All trauma which might cause fractures should be avoided. Cod liver oil and phosphorous have been given to this infant, also calcium lactate and ultraviolet ray, but fractures continued to appear in spite of careful nursing and treatment. Last fracture to appear was of the twelfth dorsal vertebra. Thyroid extract has also been tried, but without success. The prolonged use of splints should be avoided.

The prognosis of the disease is bad, as those infants not still-born usually die within a short time after birth. The prognosis of the cases occurring later in childhood is better, as some of them seem to undergo spontaneous cure. Many, however, have to live in constant dread of new fractures, and these lead to such deformities that a number of cases have come to amputation.

Total, Unilateral Ophthalmoplegia; A Case of With Paralysis of the Facial and Acoustic Nerves

By G. N. BRAZEAU, M. D.
Milwaukee

In the December number of this journal I discussed a very rare form of partial paralysis of the third nerve called internal ophthalmoplegia of nuclear origin. This report also describes another case of nuclear paralysis embracing both the intrinsic and extrinsic ocular muscles, including that of the facial and acoustic nerves of the same side as the ophthalmoplegia, due to metastasis to the left nuclear region in the brain. The causes of these paralyses, the lesions which determine them, differ only by their location from those which cause oculomotor paralyses in general. Through its intimate relationship with the brain of which it is in a way a prolongation, a sort of advanced sentinel, the eye, because of its three pairs of cranial motor nerves which it alone utilizes, not mentioning the trigeminal, is an organ whose motor troubles are of the greatest importance especially to the neurologist. From this relationship it is readily understandable why affections of the central nervous system, especially of the encephalus, figure as conspicuously as causes of oculomotor troubles. We should always think of a nuclear paralysis when in the course of an ophthalmoplegia either internal or external or both there appear symptoms of paralysis bearing on the facial and on the other remaining four pairs of cranial nerves without notable cerebral phenomena or intellectual troubles. In these cases the process extends downward toward the bulbar nuclei rather than forward. These paralyses evince a great tendency to progress, yet the nuclei nearest to the lesion may sometimes escape involvement. In parallel cases it is well to remember certain anatomical facts for their bearing on the cause and its effects.

The proximity of the third and sixth nerves to the posterior cerebral arteries explains paralyses from posterior meningitis and aneurysms of the branches of these vessels. Because the pair of third nerves is so close to one another at their exit from the cerebral peduncles, tumors in this region often involve both of these nerves. Among the many other causes can be mentioned meningitis and basilar apoplexy, or neoplasms of the tuber cinereum involving the cerebral hexagon, the nypophysis, the duramater or the cranial bones. Traumatisms and syphilis are frequent causes of oculomotor paralyses of intracranial origin.

History: Patient, a man fifty-nine years, was seen in consultation with Dr. G. W. Newell a week after being operated for cancer of the stomach. Previous to these stomach troubles the man had always been well. About four weeks previous to his death his eyes began to bother him. On examination I found the above mentioned condition. All the eye muscles were totally paralyzed including those of the lids as were also those of the left side of the face. There was total deafness in the left ear. The fundus of the left eye was normal and so was the vision for the distance, the reading being affected because of the paralysis of the accommodation. The eyeball appeared deep in the socket

and as though embedded in wax, the pupil dilated and fixed. The mental condition was good up to the last. We could not obtain an autopsy. Even though one had been performed its results might have been useless as other cases proved, so we gave a tentative diagnosis of a nuclear paralysis of metastatic origin. No other symptoms of metastasis were present. Strange as it may seem the case was without any intellectual or cerebral disturbances.

Pathological anatomy teaches us that this paralysis is often very difficult to explain. The most apt illustration that I can give of this is to cite the celebrated case of the poet H. Heine, in whom the trouble began in the bulb, extending to the nuclei, causing total ophthalmoplegia, followed by progressive muscular atrophy from no discernible cause. According to Mauthner, this paralysis takes place slowly, no set of muscles being exempt from attack even from the first. It seems theoretically impossible for such paralysis to remain stationary since the nuclei of the several muscles are so close to one another, yet such cases have been reported, though an explanation is wanting. The importance of oculomotor paralysis, however insignificant, is found in that it may be the precursor of a grave disease and of which it may be symptomatic. These ophthalmoplegias may be acute or chronic, seldom compromise life, and may exist as separate entities. Locomotor ataxia is often complicated by them. They result usually from nutritional disturbances in the region of the nuclei. While syphilis is a very common cause of oculomotor paralyses, it shows a predilection for the body of the muscles rather than for their nuclei. By attacking the bony openings through which the motor nerves pass into the orbit and by gummatous tumors in the soft tissues syphilis often causes these paralyses, though not without leaving stigmata elsewhere of a previous existence. Metastasis occurs rapidly, and usually on the left side for anatomical reasons. In this case the prognosis was very bad and treatment useless.

DOCTORS PLAN A NEW SERVICE

Physicians of the Milwaukee County Medical Society take steps to meet one of the criticisms that have been directed against them—namely, complaints of patients that sometimes they were unable to get a physician at night. The doctors will operate a service bureau which will handle night calls and which will know at all times what physicians are immediately available. For this action the medical society is to be commended.

Such a plan ought to work not only for the benefit of patients but of the doctors themselves. There is no reason at all why a physician should have to be on duty twenty-four hours a day. Doctors deserve their period of rest, especially those who have difficult work to do in the morning. They deserve their recreation, the same as other people. But of course, since sickness waits on no man, the job of having available at all times adequate medical aid has to be taken care of. That can be done, through organization, as the doctors have planned. It is another step showing that the practice of medicine is no longer a purely individual thing but is a matter for cooperation.

Further, it is planned that the doctors shall start a new educational service, giving to the public from time to time discussions on disease, sanitation, quackery and professional standards. There is a place for that, too, provided these discussions are in terms that the public can understand. There has been altogether too much mysticism about medicine. That is understandable—medicine came up through mysticism. But this is the age of science, as the doctors themselves know. And the mission of science is to let in the light, and then spread the light.—*Milwaukee Journal, May 13, 1929.*

EXAMINATIONS OF SCHOOL CHILDREN

Evidence that Wisconsin cities are committed to the policy of systematic health examinations of school children is shown by a compilation prepared by the bureau of public health nursing of the state board of health. In the 24 Wisconsin cities (exclusive of cities of the first class) which maintain school nursing personnel, the summary shows that physical examinations of pupils are made by either the local health officer, school physician, or local physicians employed for the purpose.

In most of these places city nurses are employed and the health examinations are given in the parochial schools as well as the public.

During 1927 physicians made 66,196 physical examinations in the 24 cities.

The work in the majority of the cities, according to the summary, is financed from public funds; in a lesser number, volunteer agencies and welfare committees assume the expense.

The frequency of examinations varies in differest cities from annually to every two or three years, while in a few cities only referred cases are examined, and in one city the examinations are made twice a year. Generally, parents are not present during the work; in some cities, however, they may attend at their discretion. Follow-up work is done by city or school nurses in nearly all cities reported on.

Examinations of this type make up the pre-school program for child health, and take the form of infant or pre-school clinics, visiting nurse clinics, P-T. A. annual roundups, monthly child welfare centers, physical examinations of kindergartners, and occasional examinations. In one city the work is promoted by a private organization.

TUBERCULOSIS and OTHER CHEST CONDITIONS

Tuberculosis Theses; Diagnostic

By LAWRASON BROWN, M. D.
Saranac Lake, N. Y.

(Continued)

21. Inspection reveals localized retraction of the chest wall and limitations of the chest movement.
22. Auscultation is more important than inspection, *and the detection of rales by the auscultation of the inspiration following cough is the most important procedure in the detection of physical signs of early pulmonary tuberculosis.*
23. Localized rales are second in importance only to tubercle bacilli in the sputum.
24. Rales at an apex may be due to apical pulmonary collapse, chronic bronchitis, a clearing acute bronchitis, or localized pulmonary oedema.
25. Changes in the relative lengths, quality and intensity of the inspiration and expiration are valuable but less easy to deceit.
26. *Kronig's tone planes, Goldscheider's method of percussion and Riviere's bands of impairment, as well as palpation of muscle spasm, have not proved of great value.*
27. Measurements of variations in the vital capacity of the lungs are of little benefit and possibly of harm in early pulmonary tuberculosis.
28. The importance of any physical sign is greatly increased by its persistence in one definite area.
29. The disease is practically always more extensive than the physical signs indicate.
30. Abnormal physical signs in one apex should be considered as due to pulmonary tuberculosis until proved not to be, while those at the base should be looked on as non-tuberculous until definitely proved so.
31. Abnormal physical signs should not be stated to be absent until after a second examination.
32. The fluoroscope, the roentgenogram and particularly stereograms may reveal and locate pathological pulmonary changes to be detected by no other means.
33. Extensive "peribronchial" changes on stereograms may occur with slight or no physical signs, while parenchymatous changes are usually accompanied by abnormal pulmonary sounds.
34. X-ray plates are of value only when taken and interpreted by experts.
35. Laryngeal infiltration or ulceration, limited to one side in any patient with doubtful pulmonary findings, is suggestive evidence of the presence of pulmonary tuberculosis.
36. When sputum is lacking, or when tubercle bacilli are absent on repeated examination, the possibility of the presence of bronchiectasis, hyperthyroidism, syphilis and influenza, and more rarely pulmonary tumor and Hodgkin's disease, should be borne in mind.
37. Endocarditis, sinus infections and pyorrhoea alveolaris have misled good men.
38. No modification of the tuberculin tests as yet devised differentiates clearly clinical tuberculosis that demands vigorous treatment from non-clinical tuberculosis that requires only a God-fearing life.
39. It may be impossible to determine definitely the presence or absence of clinical tuberculosis. (O. L.)

TREATMENT OF VARICOSE VEINS OF THE LEGS

A survey of a series of 4,607 cases made by Norman J. Kilbourne, Los Angeles (*Journal A. M. A.*, April 20, 1929), shows positively that the mortality by operative excision of varicose veins in America is one in 250. The mortality by injection cannot be so accurately determined; but a study of 50,000 cases shows that it is less than one in 4,000. Recurrences after operation average 30 per cent, and after injection 6 per cent. Although embolism, phlebitis, ulcer formation and gangrene are rare, no injection should be made until they have been prevented by thorough preliminary study.

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EDITORIALS

NOISE AND NERVES

THE Standard dictionary defines civilization as a condition of human communities characterized by political and social organization and order, advancement in knowledge, refinement, and the arts and progress in general.

In the countries of the so-called old world, hemmed in as they are by tradition, prejudice and religious intolerance, progress has been slow, thus affording an opportunity of adjustment.

Tradition is established through many years of activity and experience. Consequently we find little of precedent and tradition to guide us in our adolescent United States. In spite of our heterogeneous population and many other handicaps, we have gone far. Our progress, however, has been poorly balanced. It has been too rapid for our assimilation. Civilization may become top-heavy along certain lines, and we see a nation disappear or deteriorate to a third rate power. We find in the train of civilization many things which are undesirable. Some of these decimated the population of the South Sea Islands and raised havoc with the Esquimaux. Another accompaniment of our civilization is the great increase of noises. Many of them are controllable or wholly unnecessary. Dr. Charles Mayo, in a recent address in Milwaukee, stated that he "maintained a launch on the Mississippi River in order to escape people and telephones." He might have added "and many irritating noises."

There was a time when city folk could go to the country and escape the disturbance of the street cars, horns of the automobile, the roar of the elevated, the fog siren and many other noises which continue day and night, but the country is rapidly disappearing. Here, too, we find the roads crowded with noisy cars, increasing railway traffic, screeching locomobiles, suburban street cars, sputtering motor boats and even the air with its mail and pleasure planes provides its quota of noises. The lonely cottage is slipping into history with the hunter and ranger and the America we received from our fathers, has gone from us, and the America that we have we may not bequeath to our sons. Where, other than in the heart of the forest, can we go for quiet and rest? It has been stated that human beings adjust themselves to all these disturbances, but can anyone claim that they sleep as well in the heart of the city or along the side of an elevated as in the quiet environment of country life? While one may not be immediately conscious of the ill effects of continuous irritation, it collects its toll in the end. Follow the traffic on one of our highways on a weekend and watch the hegira from the city. These people are unconsciously trying to escape these irritations. Dr. David Laird states that country children grow faster than their city cousins and he made the interesting discovery that "white rats kept in a quiet place grew 20 per cent faster than similar animals kept in the midst of hurly-burly." A great number of calories are wasted by noise-troubled children in useless muscle tension and fear reactions.

According to recent statistics, it has been discovered that 72 per cent of the workmen in boiler works have impaired hearing which in time causes them to lose their positions because they endanger

the safety of their fellow workmen. Isolated attempts have been made occasionally in this country to eliminate many of these unnecessary noises, but nothing constructive or satisfactory has thus far been accomplished. Germany is making an intensive crusade against industrial noises and in New York City there is an "anti-noise" society which has presented the subject to the aldermanic body. Recently the British Medical Society passed a resolution at its annual meeting condemning preventable noise and sent an important memorandum on the subject to the Minister of Health. Physicians have taken up the question because it is becoming increasingly obvious that inability of large numbers of the community, especially brain workers, to obtain the requisite amount of rest is interfering with their efficiency, and because of the disturbance caused to those who are ill in the hospitals or in their homes and to those who suffer from insomnia and to naturally light sleepers. A further resolution was carried without discussion to support any measure designed to suppress any unnecessary noises, and declared that any preventable noise between the hours of 11 p. m. and 6 a. m. is injurious to health and should be regarded as a nuisance within the meaning of the health acts.

The celebrated psychiatrist, Sir Robert Jones, held that the nervous system must in many cases be injured by continued violent auditory stimuli day and night. This action of the British Medical Society led to active propaganda along this line by the British press from which much good may be expected.

The limits of an editorial prevent going further into this matter, but we, as a profession, can do much to stem the tide of this evil—by preachments and personal example, by unitedly supporting all measures to regulate or suppress unnecessary noises, and by a campaign of propaganda through the medical and lay press and, if we take these measures, we will make life more tolerable for ourselves and the general public. *A. W. R.*

CURABILITY OF TUBERCULOSIS

DOUBT of the curability of tuberculosis dies hard in the minds of many very competent and studious physicians. Some others, perhaps because they are naturally more "faithful," have swung altogether too far in the other direction and display an unwarrantable faith in its curability even with inadequate therapy. To each class, a study of the experience of the Metropolitan Life Insurance Company should be illuminating.

This company maintains a more or less ideal sanatorium for its tuberculous employees. A medical examination upon employment, followed by close medical surveillance, presents practically ideal opportunities for early discovery, early treatment, and thence in due time to replacement in suitable, properly supervised employment. They do have cases in advanced stages on admission, however.

They find that their cases discharged alive from the sanatoria show a mortality more than three and one-half times that of the general staff. To most of us, that must seem "pretty good" but certainly nothing to make us careless of the everlasting seriousness of the disease.

It is interesting to note that male ex-patients have a better subsequent mortality and employment record than female ex-patients. Most encouraging is the testimony that male patients, incipient on admission, showed a subsequent normal mortality.

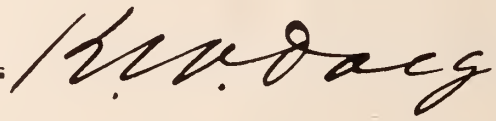
Tuberculosis is always a serious disease, never a hopeless one, and discovered early, treated promptly and efficiently over a long period is very positively a *curable disease.*

DEGENERATIVE DISEASES

THAT the degenerative diseases have failed to secure a proper amount of attention from physicians, as well as from the rapidly increasing number of victims of these diseases, is a fact that few will question. We think it to be also true, that the average medical man's library contains far too little really scientific matter on the subject of positive health. As a profession, we've been characteristically thinking far more in terms of *disease* than in those of *health.*

This is not "good business" and it's not "good medicine." After all, the practice of medicine should not be juggling with diseases but improving and maintaining the physical welfare of our clients. The day has passed when we were content to have our automobile garages merely repair stations. Today we demand and cheerfully pay for "maintenance." The inarticulate lay public wants and will cheerfully pay for "health maintenance." Why are we not offering it more cheerfully? *H. E. D.*

THE PRESIDENT'S PAGE



EARLY AND LATE DIAGNOSES, CORRECT AND COMPLETE ONES

DIAGNOSIS has always been the foremost and most difficult problem to the physician. In order to know that disease is present we must be able to recognize symptoms. Symptoms are the variations and deviations from the course of normal physiologic functioning of an organ. A cough is a variation from the smooth rhythm of respiration; vomiting is a deviation from onward progress of food in the intestinal canal. Normal functioning is automatic, is usually not observed and thought of, and to the healthy person it is nothing over which to lose time. For that reason slight variations or insidiously developing variations of physiologic function are rarely noticed by the individual and often not by the physician. Early recognition of symptoms and in consequence *early* diagnoses are more or less rare.

Owing to the interlocking of various organic functions and as a result of their interdependence of action, viz: heart and kidney, variations in the one produce variations of a different kind in the other organ or organs. Thus a series of symptoms or symptom-complexes are formed. Take heart disease, with it are involved the respiratory organs (dyspnoea), the capillaries (oedema), and the kidneys (change in urinary excretion). Consider nephritis. Besides the kidney it affects the vascular system (oedema), the nervous system (convulsions), and the heart (cardiac hypertrophy). Think of Graves' disease, affecting besides the thyroid, the nervous system (tremor), the metabolic function (weakness and wasting), the heart (tachycardia), etc. When organs other than the initial one become involved subsequently physiologically connected symptoms appear and symptom-complexes develop. A diagnosis made at this time must be considered a late one.

In general practice the majority of diseases are not recognized until a number of organs show signs of disturbance and symptom-complexes are manifest. Some diseases are unrecognizable until they have gone to the stage of the formation of symptom-complexes. When this occurs the most manifest disurbances and most striking symptoms are not necessarily the ones of the organ first affected; i. e., shortness of breath in heart disease; blindness in brain tumor; digestive disturbances in pulmonary tuberculosis, etc. A knowledge of the sympathetic action and interdependence of physiologic functions will enable us to trace this trouble to the organ first attacked and a *correct* diagnosis is the result.

The originally offending organ having been located and the lesion recognized; i. e., a correct diagnosis having been made, it is of the utmost importance from a therapeutic as well as from a prognostic standpoint, also, to ascertain the extent of the damage done to the secondarily affected organs and thus arrive at the *complete* diagnosis.

Briefly, all diagnoses should be *early,* of necessity they often are *late.* It is not enough merely to make a *correct* diagnosis. A *complete* one is just as important.

The State Medical Society of Wisconsin

ORGANIZED 1841

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Barron-Polk-Washburn-Sawyer-Burnett	S. O. Lund, Cumberland	S. R. Medley, Shell Lake.
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Dane	H. H. Reese, Madison	C. K. Schubert, Madison.
Dodge	L. M. Bachhuber, Mayville	A. A. Hoyer, Beaver Dam.
Door	John Hirschhoeck, Forestville	T. C. Proctor, Sturgeon Bay.
Douglas	E. A. Myers, Superior	J. W. McGill, Superior.
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Green	Edward Blumer, Monticello	J. F. Mauermann, Monroe.
Green Lake-Waushara-Adams	C. U. Senn, Ripon	A. J. Wiesender, Berlin.
Iowa	A. D. Brown, Mineral Point	M. W. Trentzsch, Highland.
Jefferson	E. W. Bowen, Watertown	M. G. Peterson, Lake Mills.
Juneau	C. A. Vogel, Elroy	A. T. Gregory, Mauston.
Kenosha	H. A. Binnie, Kenosha	Margaret Pirsch, Kenosha.
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Lafayette	W. W. Peck, Darlington	S. A. J. Ennis, Shullsburg.
Langlade	P. J. Dailey, Elcho	J. C. Wright, Antigo.
Lincoln	E. K. Morris, Merrill	W. H. Bayer, Merrill.
Manitowoc	J. E. Meany, Manitowoc	A. P. Zlatnik, Two Rivers.
Marathon	W. A. Green, Wausau	Verne E. Eastman, Wausau.
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Sauk	E. McGrath, Baraboo	Roger Cahoon, Barahoo.
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Shehoygan	C. J. Weher, Shehoygan	R. L. Zaegel, Sheboygan.
Trempealeau-Jackson-Buffalo	C. O. Rogne, Ettrick	R. L. MacCornack, Whitehall.
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Waupaca	T. E. Loope, Iola	A. M. Christofferson, Waupaca.
Winnehago	D. J. Ryan, Neenah	W. N. Linn, Oshkosh.
Wood	D. Waters, Wisconsin Rapids	W. G. Sexton, Marshfield.

SOCIETY PROCEEDINGS

BARRON-P-W-S-B

Physicians from the five counties, Barron-Polk-Washburn-Sawyer-Burnett, enjoyed an interesting meeting at Frederic held on June 5th. The following program was presented: "Tonsillectomy," Dr. J. A. Diamond, Frederic; "Diabetes," Dr. Walter Andrews, Frederic; "A Case of Tularemia," Dr. E. F. Freymiller, Marksville, Minn.; "Insurance Reports," Mr. Theo. Wiprud, Frederic; "Osteomyelitis with Incision and Vaseline Drainage." by Dr. R. G. Arveson, Frederic; "Diagnosis and Treatment of Infection of the Hand," Dr. Albert Tormey, Madison; "Resumé of the Year's Activities and a Brief Survey of New Legislation," Dr. S. R. Medley, Shell Lake.

Dr. J. A. Diamond, Frederic, was elected president of the society for the ensuing year. Dr. I. G. Babcock, Cumberland, was chosen vice-president; Dr. S. R. Medley, Shell Lake, secretary-treasurer; Dr. D. L. Dawson, Rice Lake, delegate; Dr. I. G. Babcock, Cumberland, alternate; and Dr. A. N. Nelson, Clear Lake. censor.

The program was followed by a banquet at Diamond Lake resort. During the banquet the physicians were addressed by Atty. W. T. Doar of New Richmond who discussed the relationship between the legal and medical profession. *S. R. M.*

BROWN-KEWAUNEE and SIXTH AND EIGHTH DISTRICTS

The Sixth and Eighth Districts of the State Medical Society held a meeting in conjunction with the Brown-Kewaunee County Medical Society on June 4th, in the Crystal room of the Hotel Northland, Green Bay. After a short business meeting the afternoon program was carried out as follows:

Mr. Fred M. Wylie, legal counsel, substituted for Mr. George Crownhart, secretary, and read a paper on "Legislation." He brought out the point that much has been done and much is to be done in order to keep quackery eliminated from the medical profession. He was followed by Dr. James C. Sargent, Marquette Medical School, Milwaukee, who spoke on "Common Errors in the Radiological Diagnosis of Urinary Stones," illustrated by lantern slides. He gave an interesting talk and brought forth many important phases in this work.

Dr. James R. Learmonth, Mayo Clinic, talked on "General Practitioner and Post-Operative Neurologic Cases." He said that much is being done in brain and nerve surgery, restoring of a useless arm to practically its normal condition by the repair of the nerve supply. This pertains mostly to injuries. His talk was also illustrated by lantern slides.

After a six o'clock dinner, President Karl W. Doege, of Marshfield, gave an interesting address in which he urged the older men practicing medicine and surgery to stay active so that the laity could receive the fruit of their long experience and that the surgeon should know more about medicine and the medical man should know more about surgery. Dr. Archibald L. Hoyne, director of the Chicago Hospital for Contagious Disease, Chicago, discussed "Epidemic of Meningitis, Diagnosis and Treatment." He brought out the fact that an early diagnosis and an injection of serum into the spinal canal reduces mortality.

The meeting was attended by one hundred and twenty-five physicians from this portion of the state. *M. H. F.*

GRANT

The annual May meeting of the Grant County Medical Society was held Thursday, May 23rd, in the Grantland Club rooms, Lancaster, beginning at two-thirty. The scientific program was as follows: A paper on "Spinal Anesthesia" by Dr. R. B. Stout, Jackson Clinic, Madison; "Uses and Abuses of Local Anesthesia," Dr. Edmund H. Mensing, Milwaukee; discussion was led by Dr. S. W. Doolittle, Lancaster; "Report of a Case of Undulant Fever," Dr. F. H. Baldwin, Bloomington; "Undulant Fever," Dr. W. D. Stovall, State Laboratory of Hygiene, Madison; discussion led by Dr. J. C. Betz, Boscobel; "Diagnosis and Treatment of Peptic Ulcer," Dr. R. C. Blankinship, instructor of Internal Medicine, University of Wisconsin; general discussion.

Dr. R. C. Buerki, superintendent of the State of Wisconsin General Hospital and Dr. George Ewell, of the Jackson Clinic, Madison, were guests of the society and joined in the discussions of papers.

A six o'clock dinner was served by the ladies of the Evangelical church in the club rooms. *M. B. G.*

LA CROSSE

The regular meeting of the La Crosse County Medical Society was held Tuesday evening, May 21st, in Pioneer Hall, La Crosse. There were thirty members in attendance. Dr. Robert E. Burns, Wisconsin General Hospital, Madison, gave a talk on "Fracture of the Hip" and presented several interesting orthopedic cases.

Meetings will be discontinued during the summer months. *J. E. H.*

MARINETTE-FLORENCE

The Marinette-Florence County Medical Society held its regular monthly meeting on Friday evening, June 7th. Dr. Albert R. Tormey, Madison, presented a moving picture and paper on "Hand Infections" which was very instructive and interesting.

Dr. K. C. Kerwell, Stephenson, Michigan, left early in June for Europe, where he will spend the next six months or year studying in the different clinics. *M. D. B.*

PIERCE-ST. CROIX

Fifteen members of the Pierce-St. Croix County Medical Society met at the Beebe, New Richmond, during May and made plans for the monthly meetings for the year. The June meeting will be held in Glenwood City,

Dr. A. E. McMahon, in charge. The July meeting has not been arranged but the August meeting will be held in Hammond on the 21st, when Dr. E. L. Boothby's eightieth birthday will be appropriately celebrated. Dr. Boothby has been engaged in medical practice fifty-four years and is an active member of the society. *J. W. P.*

RACINE

Dr. I. R. Sisk, Madison, addressed the members of the Racine County Medical Society on Friday, May 31st, at "Little Bohemia," Racine. His subject was "Preoperative and Postoperative Care of Patients with Benign Hypertrophy of the Prostate Gland."

The annual picnic of the society will be held at Brown's Lake some time during the month of July. *S. J.*

WALWORTH

The Walworth County Medical Society met at Lake Geneva hotel Tuesday evening, May 14th, when Dr. Olson, Milwaukee, addressed the members. Dr. B. J. Bill, Genoa City, delivered a history of the medical profession in Walworth county dating back to 1830. *S. G. M.*

MILWAUKEE ACADEMY

Dr. C. H. Bunting, professor of pathology, University of Wisconsin, was the speaker Tuesday evening, May 28th, at the meeting of the Milwaukee Academy of Medicine. He spoke on "Diseases of the Bone Marrow and Lymph Glands." Plans were discussed for the proposed Medical Arts building and members were urged to contribute $35,000 in endowments and life membership to assist the work.

Work done in English laboratories, showing that when growing cells, as in cancer or malignant tumors, are exposed to radium emanations, growth ceases and degeneration begins, was demonstrated in the Canti film shown at the joint meeting of the Academy and the Milwaukee County Radiological Society at a meeting held on June 11th.

Dr. Stanley J. Seeger spoke on "Sedimentation Reaction in Children," Dr. M. G. Peterman opening the discussion. *D. E. W. W.*

MILWAUKEE PEDIATRIC

The third meeting of the Milwaukee Pediatric Society was held at the Milwaukee Children's Hospital on Wednesday evening, May 8th. Papers were presented as follows: "The Functional Interrelation of Muscle and Bone" by Dr. Eben J. Carey, professor of anatomy, Marquette University Medical School, and "Acute Mediastinal Abscess," case presentation by Dr. B. J. Malnekoff, Milwaukee. *F. R. J.*

NORTH WISCONSIN SOCIETY OF OPHTHALMOLOGY

The spring meeting of the North Wisconsin Society of Ophthalmology and Oto-Laryngology was held at Eau Claire, on Monday, May 27th. The session was opened with a dry clinic in ophthalmology conducted by Dr. A. D. Prangen, Mayo Clinic, at Sacred Heart Hospital. Dr. J. C. Baird presented an x-ray diagnosis of mastoiditis.

The afternoon meeting was also held at the hospital. Dr. Prangen opened the meeting with an address on "Cataract Surgery." Dr. Edwin McGinnis, Chicago, spoke on "Surgical Treatment of Subacute and Chronic Ethmoiditis;" Dr. A. W. Adson, Mayo Clinic, on "Diagnosis and Treatment of Cerebral Diseases and Complicating Mastoiditis and Frontal Sinusitis."

Following a six o'clock dinner at the Elks Club Dr. Prangen spoke on "Cross Eyes in Children;" Dr. McGinnis on "Mastoiditis" and Dr. A. W. Adson, Mayo Clinic, on "Treatment of Raynaud's Disease and Allied Vascular Diseases by Thoracic and Lumbar Sympathetic Ganglionectomy."

RADIOLOGY SECTION

The Marshfield Clinic was host to the members of the Radiological Section of the State Medical Society at its annual meeting held at Marshfield on May 24th and 25th. The section adopted a resolution pledging to do everything in its power to aid those in authority in regard to safeguarding human life by providing for the safe storage of combustible x-ray films. Speakers on the two-day program included: Dr. K. W. Doege, Marshfield; Dr. W. G. Sexton, Marshfield; Dr. L. A. Copps, Marshfield; Dr. H. M. Coon, Stevens Point; Dr. A. R. Altenhofen, Milwaukee; Dr. Lawrence V. Littig, Madison; Dr. Paul C. Hodges, Chicago; Dr. Harry Foerster, Milwaukee, and H. B. Podlasky, Milwaukee.

Among those present at the meeting were: Dr. K. W. Doege, Dr. and Mrs. R. P. Potter, Dr. and Mrs. K. H. Doege, Dr. and Mrs. R. H. Juers, Dr. and Mrs. Lyman A. Copps, Dr. and Mrs. J. B. Vedder, Dr. and Mrs. A. L. Millard, Dr. and Mrs. W. G. Sexton, Dr. Ray Baldwin, Dr. H. P. Benn, Dr. S. G. Schwarz, and Dr. H. H. Milbee, all of Marshfield; Dr. R. J. Troup, Green Bay; Dr. G. J. Hodges, Madison; Dr. Paul C. Hodges, Chicago; Dr. and Mrs. F. H. Kuegle, Janesville; Dr. A. O. Olmsted, Green Bay; Dr. L. Frick, Athens; Dr. A. R. Altenhofen, Milwaukee; Dr. L. M. Lundmark, Ladysmith; Dr. E. Wisiol, Stevens Point; Dr. W. F. Cowan, Stevens Point; Dr H. W. Housley, Neillsville; Dr. H. R. Foerster, Milwaukee; Dr. and Mrs. J. R. Longley, Fond du Lac; Dr. L. V. Littig, Madison; Dr. J. N. Sisk, Madison; Dr. J. C. Baird, Eau Claire; Dr. G. W. Stevens, Milwaukee; Dr. A. Doerr, Milwaukee; Dr. F. W. Mackoy, Milwaukee; Dr. H. M. Coon, Stevens Point; Dr. A. L. Schemmer, Colby; Dr. and Mrs. E. M. McGrath, Appleton; Dr. E. B. Elvis, Medford, Dr. R. C. Nystrum, Medford; Dr. E. W. Beeham, Madison; Dr. Harold Newman, Madison; and Dr. R. L. Morrison, Madison.

MARRIAGES

Dr. Reuben Harold Stiehm, Madison, to Miss Marie Wilhelmina Dueno, Milwaukee, at Manitowoc on June 15th.

Dr. Ralph E. Campbell, Madison to Miss Helen Elaine Wheeler, West Hartford, Conn., on June 8th in Hartford.

NEWS ITEMS AND PERSONALS

A death from tularemia, the first from this disease to be reported in Wisconsin, occurred in Douglas county last month, the state board of health made known recently. The victim was a 63-year-old man.

—△—

Nineteen clinics were sponsored by the Racine County Medical Society during the week of June 10th to 14th in three junior high schools and at the health department. Members of the medical society appointed by the president conducted these clinics, assisted by the health department nurses.

The American Red Cross baby clinics also participated as did the public schools, the health department, organizations representing the Lutheran and Catholic parochial schools, and the junior league, in addition to the legion and auxiliary.

—△—

Dr. A. A. Sinaiko, Madison, specializing in diseases of the eye, ear, nose and throat, has purchased the practice and equipment of the late Dr. G. H. Lawrence, Stevens Point, and has leased the Lawrence offices in the Shafton block.

Dr. Sinaiko, a graduate of the University of Wisconsin and of Northwestern University medical school in 1925, served an interneship of a year and a half in the Los Angeles, Calif., county general hospital. He spent fifteen months abroad, attending clinics at Vienna, and also did operative work at Budapest and in Czecho-Slovakia.

—△—

Dr. James R. Regan, who recently received his degree from Marquette university at the commencement exercises in June, has been appointed to the commissioned staff of the Soldiers' Home as assistant surgeon with the rank of first lieutenant.

The appointment came from Brig. Gen. George H. Wood of Cleveland, Ohio, president of the board of managers. Dr. Regan served his interneship at the county hospital. He will join the Soldiers' Home staff on July 16th.

—△—

Dr. Adolph B. C. Bock, son of the late Dr. Otto B. Bock, Sheboygan, received the degree of doctor of medicine at the one hundred and seventy-third commencement for the conferring of degrees at the University of Pennsylvania on June 9th.

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The Graduated Nurses' club held its June meeting at Beloit with Dr. Benjamin Fosse as the speaker. His topic was "Present Day Goiter Problems."

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Dr. L. H. Flynn, Eau Claire, has been appointed county physician by the local board to fill the vacancy in that office caused by the recent death of the late Dr. J. F. Farr. Dr. Flynn is also city physician by appointment of the city council.

—△—

Dr. Edward McGrath, Baraboo, attended a special clinic at the Rush Medical College, Chicago, during the early part of June.

An inventory of the estate of Dr. Horace M. Brown, widely known Milwaukee physician, filed recently, values the property at $468,078, including eight violins valued at $1,000. The real estate is valued at $60,000. The estate was left largely to the widow, Mrs. Ann Brown.

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Dr. I. D. Mishoff has returned to Milwaukee following a four months' absence on a Mediterranean trip. He visited Syria, Palestine, Egypt and the Holy land.

—△—

On May 21st Madison entertained a distinguished visitor from Norway, Dr. K. Wefring, who is touring the United States upon special assignment from his government. Dr. Wefring is director general of the Norwegian medical service, which corresponds to the United States public health service, having offices at Oslo.

The visiting official was escorted by Dr. C. A. Harper to different branches of the state government and educational services in which he was especially interested, including the legislature, the medical school, offices of the State Medical Society, and state laboratory of hygiene.

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All physicians of Eau Claire will cooperate with business men this summer and will close their offices Saturday afternoons, it was announced recently. The closings took effect on May 25th and will continue through June, July, August and September.

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Dr. L. V. Littig will have complete charge of the new x-ray department at the Madison general hospital. He has been associated with the hospital as roentgenologist since 1922.

Dr. Lester McGary will supervise the enlarged laboratory at the hospital. He has two technicians and one nurse assisting him.

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Dr. Louis Orban, who has been the senior physician at the Central State Hospital at Waupun for the past three years, has resigned and left on June 1st to become physician in charge of West Hill sanatorium, Riverdale, N. Y.

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Dr. Elizabeth Seiler, school physician of the city health staff of Kenosha, addressed the conference of club presidents and program chairmen in Chicago at Fullerton hall on May 16th. She spoke on "A New Concept of Motherliness." Dr. Seiler has specialized in child psychology and individual psychology, majoring in that work in her researches abroad last year.

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Dr. John W. Coon, medical director at River Pines sanatorium Stevens Point broke his left leg in a fall from a stepladder the latter part of May. Both bones were broken, one break being at the ankle and the other just above it.

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Dr. Magnus Smedal, Madison, who has just completed the medical course at Harvard university, left recently for Detroit to begin his interneship. Dr. Smedal earned his bachelor and master degrees at the University of Wisconsin.

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Dr. Victor H. Cremer, for the past several months

associated with Dr. H. A. Jegi, Galesville, has announced that he will open a practice at Tomah.

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Dr. John P. Koehler, Milwaukee commissioner of health, attended a meeting of health officials of the middle west at Chicago the first week in June. The meeting was called by the committee on administrative practice of the American public health association.

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Dr. R. D. Thompson, formerly associated with Dr. A. C. Edwards, Baraboo, has accepted a position at the State sanatorium at Wales. Dr. Thompson practiced at Kalamazoo, Michigan, since leaving Baraboo.

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Dr. Paul H. Rupp, Milwaukee, was named recently as superintendent of the county asylum for the chronic insane. Dr. Rupp was appointed by the board of trustees of county institutions after passing the requisite civil service examination. He has been county physician since 1915, handling mental cases for district and probate courts. He became physician for the juvenile court in 1916 and has had charge of the detention home.

Graduated in 1905 from Marquette medical school, Dr. Rupp started a general practice, later specialized in mental diseases, and gave up his private practice about ten years ago.

Dr. Rupp succeeds Dr. William F. Beutler, Wauwatosa, who died several months ago.

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If physicians have violated the United States narcotic act or the federal statute forbidding the use of the mails to defraud in the course of the practice of their profession the state board of medical examiners can revoke their licenses to practice in Wisconsin upon the filing with the board a record of the information verdict and judgment of the court in which the physicians were convicted.

Such is the opinion of the attorney general rendered upon the request of Dr. Robert E. Flynn, secretary of the state board of medical examiners. The opinion holds, however, that the right of summary action by the board is entirely subject to the test as to whether the crime of which a physician is convicted is committed in the usual course of the practice of his profession.

If the crime is committed outside of the course of such practice a complaint must be filed in the circuit court and an order of the court obtained after a trial before a license can be revoked.

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Dr. William F. Lorenz, Madison, has accepted an appointment as colonel in the medical reserve corps. This was announced by the war department the latter part of May.

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Dr. H. A. Schulz, formerly of Fremont, has now established offices at Greenwood. Dr. Schulz came to Fremont from Ripon in 1927.

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Dr. W. T. Lindsay, Madison, entertained the members of the South side men's club recently with an illustrated lecture on the Yellowstone National park. Dr. Lindsay has spent several summers at Yellowstone park and showed interesting slides.

Dr. C. F. N. Schram, physician for the Beloit plant of Fairbanks, Morse and Company, recently received notification of his election as president of the American Association of Industrial Physicians and Surgeons. The election took place at the annual meeting of the association at Detroit which Dr. Schram was unable to attend.

The association aims to maintain high standards in industrial work and to keep up on the latest methods for preventing loss of time through illness and accidents.

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Drs. Lindsay and Vingom, Madison, have moved their offices from the Washington building to suite 405, Wisconsin Power and Light Company building, North Fairchild st., and West Washington ave.

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Milwaukee county's new $700,000 hospital and medical building on the old Schandein site, Twenty-fourth and Wisconsin ave., opened the first week in June with the dispensary ready for operation.

The medical clinic occupies the first and one-half of the second floors while the mental clinic has been located in the English style basement.

The county's emergency hospital, which will displace the Johnson Emergency hospital on Michigan st., will occupy the remainder of the building in about a month. It will be a fifty bed hospital but under stress can be enlarged to eighty beds.

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Dr. J. R. Longley Fond du Lac, has been designated medical examiner in that city for the United States Veterans' bureau. Notice of his appointment was received by Dr. Longley from C. H. Sweet, chief of the personnel division of the bureau at Washington.

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Improvement of Doctor's park, a large woodland tract along Lake Michigan near Fox Point donated to the city of Milwaukee by the late Dr. Joseph Schneider, is now under way. Men are at work clearing dead trees, brush, poison ivy and noxious weeds, to prepare a public parking space and to install fences, a water system and comfort stations.

The Doctor's park shall be maintained in its wild state as nearly as possible, and regulated in a manner to discourage picnic parties and those not interested primarily in studying bird and plant life. Plans are to close the park at seven to prevent night parkers and roisterers, and to protect wild life from disturbance.

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Dr. Dell Andrus, Ashland, was re-elected county physicia[illegible] [illegible]r the coming year by members of the county bo[illegible] [illegible] quarterly session recently.

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[illegible]r. Fred B. Welch, health officer for the city of Janesville, addressed the rural Rock county normal school students recently on "Health, Disease and the People."

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Dr. John J. Davis, Madison, is one of four members of the class of "72," the first class to receive degrees from the University of Illinois, who are still living. Dr. Davis after graduating from the University of Illinois, completed a course in Hahnemann Medical College, Chi-

cago in 1875. He practiced medicne for many years in Racine but retired several years ago from active practice. He is devoting his time to botany, and is now curator of the herbarium of the University of Wisconsin.

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Dr. Ralph Sproule, a member of the board of directors of the Milwaukee County Medical Society, was appointed to take complete charge of details of the proposed physicians' service bureau at a meeting of the board the latter part of May.

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The Milwaukee county civil service commission in May certified to the board of trustees of county institutions the names of three physicians high in the examination for assistant superintendent and medical director of the emergency dispensary unit of the Milwaukee county hospital. Those certified were: Dr. Eugene A. Smith, Milwaukee; Dr. Robert S. Irwin, Lodi, and Dr. E. F. Peterson, Wauwatosa.

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A series of twelve weekly post-graduate lectures and clinics for groups of physicians in six northwestern Wisconsin cities will be held this summer, starting July 1st, under the direction of Nelson D. Conners, University of Wisconsin field representative. Superior, Ashland, New Richmond, Eau Claire-Chippewa Falls, Whitehall and Rice Lake are the six cities in which the courses will be given.

The lectures and clinics will be on the care and feeding of infants and the prevention of childhood diseases. Results of recent therapeutic research on diphtheria, measles, whooping cough, scarlet fever, and pneumonia will be given special attention.

Dr. Alexis Hartmann and Dr. Francis Scott Smyth of Washington university, St. Louis, Mo., each will conduct six lecture-clinics in the course visiting the various cities in turn each week.

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Following delivery of the commencement address for the exercises of Marquette University, Dr. William J. Mayo, was given the honorary degree of doctor of science.

Justice Charles H. Crownhart, of the Wisconsin supreme court, father of the secretary of the State Society, received honorary degree of doctor of laws at the same exercises.

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Dr. Francis Pomainville, son of Dr. and Mrs. F. X. Pomainville, Wisconsin Rapids, who received his degree in June at Marquette University, Milwaukee, and who has served the past year as interne at a Fond du Lac hospital, has been secured by the Arpin Advancement association to open an office in that village.

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The first crippled children were received at Kenosha's $100,000 orthopedic school on June 10th. A clinic for diagnosing and prescribing physio-therapy treatment for the children was conducted under the auspices of the board of education with the cooperation of the Kenosha county medical society for all children of school age who have disabilities.

Dr. H. C. Schumm, Milwaukee, diagnosed the cases as they were brought in and treatment was prescribed.

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Dr. M. P. Andrews, Manitowoc, is the new head of the Holy Family hospital staff and will have as his assistants Dr. J. M. Kelley, Cato, as vice president and Dr. C. M. Gleason, Manitowoc, as secretary-treasurer.

Dr. A. M. Farrell, retiring president, thanked the staff members for their cooperation in the year past and a vote of thanks was extended to Dr. F. E. Turgasen for the program presented during the year.

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Dr. Charles F. Ulrich has come to Kenosha to assume charge of the department of diagnosis and internal medicine at the Kenosha Clinic. Dr. Ulrich is a graduate of the University of Nebraska and received the degree of master of science from the University of Pennsylvania Graduate School of Medicine in 1925. During the past four years Dr. Ulrich was a member of the faculty of Creighton Medical college, Omaha, in the capacity of professor of diagnosis.

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Wisconsin physicians are invited to attend the thirty-second annual meeting of the Michigan Upper Peninsula Medical Society which will be held in Ironwood, Michigan, on August 7th and 8th. Dr. P. R. Lieberthal, of Ironwood, chairman of the program committee, has arranged an excellent program. It follows: Wednesday, Aug. 7th—"President's Address," Dr. H. E. Perry, Newberry, Mich.; "Treatment of Fractures," Dr. C. W. Hopkins, Chicago; "The Physician's Library," Dr. A. F. Fischer, Hancock, Mich.; "The Early Diagnosis of Exophthalmic Goiter," Dr. Samuel F. Haines, Rochester, Minn.; "Injection of Varices and Ulcers of the Lower Extremities," Dr. J. J. Walch, Escanaba, Mich.; "Modern Methods of Treatment of Benign Prostatic Obstruction," Dr. Verne C. Hunt, Rochester Minn. A banquet will be served at six-thirty for members and visiting physicians and their ladies. A public meeting is scheduled for eight o'clock at which Dr. A. J. Cramp, American Medical Association, Chicago, will speak on "Patent Medicine and the Public Health."

Program for Thursday, August 8th. "Forceps and Episiotomy," Dr. E. L. Cornell, Chicago; "Treatment of Diabetes Mellitus," Dr. Arthur C. Curtis, Ann Arbor, Mich.; "Focal Infection from the Standpoint of the Proctologist," Dr. Louis J. Hirschman, Detroit, Mich.; "Infections of the Hand," Dr. S. L. Koch, Chicago; "Personal Experiences with Pituitrin," Dr. W. L. Maccani, Ironwood, Mich. A golf tournament is planned at the Country Club for the afternoon. All meetings will be held at the Memorial building.

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Dr. Gilbert E. Seaman has returned from Europe where he attended the International Congress of Military Medicine at London and the Royal Institute of Public Health at Zurich. Dr. Seaman acted as chairman of the American delegation and was honored by election as a Fellow of the Royal Institute of Public Health.

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Dr. Joseph F. Smith, following a Wausau Rotary luncheon on June 16th, told some interesting facts about

the organized medical profession and its relation to the public.

Dr. and Mrs. A. N. Hedges, Ridgeway, left the first of June for Whittier, Calif., where they will make their future home. The doctor has been practicing in Ridgeway since 1919, and the family have made many friends who regret their leaving.

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Dr. Roger G. Osterheld, Concord, N. H., will open a practice at Stoughton about October 1st. Dr. Osterheld at present is a member of the staff of the New Hampshire State hospital at Concord.

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Dr. Edgar Craite, Milwaukee, formerly medical superintendent at Emergency hospital, was appointed medical attendant and alienist attached to the district court. Dr. Craite succeeds Dr. Paul H. Rupp, who was recently made superintendent of the county hospital for chronic insane.

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Dr. S. R. Banfield, formerly of Crandon, has now established a practice at Edgar.

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Work will soon be commenced on a nurses' home in connection with the Wausau Memorial Hospital, the building being made possible by the recent donation of $100,000 by Mr. and Mrs. John Ross in commemoration of Mr. Ross' parents.

BIRTHS

Dr. and Mrs. E. A. McKenna, Antigo, announce the birth of a daughter, born Wednesday, June 12th.

DEATHS

Dr. John Mockler Conroy, superintendent of the Pureair Sanatorium at Bayfield, died Monday afternoon, June 3rd, following an illness of only a few hours from a stroke of apoplexy. Dr. Conroy received his early education at St. Mary's, Kansas, and St. Louis University and graduated from the University and Bellevue Hospital Medical College of New York in 1899. He also studied at London and Vienna.

Dr. Conroy practiced medicine at Neillsville and at Milwaukee, where he was physician at the Shorewood hospital. He served as captain in the medical corps during the World war and as army doctor in the Spanish-American war. The doctor specialized in treating tuberculosis and for several years was in charge of a tuberculosis sanatorium at Nopeming, Minn. He came to Bayfield in March, 1928.

The deceased was a member of the Ashland-Bayfield-Iron County Medical Society, the State Medical Society of Wisconsin, the American Medical Association, the Wisconsin Anti-Tuberculosis Association, the National Tuberculosis Association and the International Tuberculosis Association.

Dr. Lauritz A. Larsen, Colfax, died on Friday morning, May 17th, following an attack of influenza. Dr. Larsen was born in the year 1864 and graduated from Rush Medical College, Chicago, in 1896. He came to Colfax from Chicago thirty-three years ago and has been a source of comfort to members of nearly every family in Colfax and surrounding country some time or other.

Dr. Larsen was a member of the Chippewa County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. Surviving him are his wife, a son and a daughter.

Dr. Richard C. Aylward, Madison, died at his home suddenly on Monday night, May 20th, after a heart attack. Dr. Aylward was born at Black Earth on April 14, 1872, and graduated from Rush Medical College in 1900. He practiced at Wausaukee, Minocqua, Star Lake, and Port Edwards before locating in Madison in 1913.

Dr. Aylward was a member of St. Mary's hospital staff and of the Dane County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. He is survived by his wife, a son and two daughters.

Dr. Thomas R. Hastings, Reedsburg, died suddenly at the Sauk County sanitarium on Monday, May 27th. He had been about the sanitarium for a half hour before suffering the heart attack. Dr. Hastings was born in 1859 and was a graduate of the College of Medicine and Surgery, Chicago, in 1897.

The doctor was a member of the Sauk County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. His wife and six daughters survive him.

Dr. Elbert S. Garner, Richland Center, died at his home on June 7th after an illness of several weeks. Dr. Garner had practiced medicine in Richland Center for the past thirty years and was active until his last illness. The doctor was born in 1854 and graduated from the College of Physicians and Surgeons of Keokuk, Iowa, in 1881. He was licensed in the state in the year 1899. He is survived by his wife, two sons and three daughters.

Dr. John V. Wenzel, Ashland, died of heart disease on Saturday, June 15th, at a Marshfield hospital where he was spending two weeks in rest. Death came suddenly, and without warning, a short time before Dr. Wenzel was to have returned to Ashland.

Born in La Crosse June 27, 1876, Dr. Wenzel would have been fifty-three years of age in a little more than a week. Dr. Wenzel attended and graduated from the University of Illinois College of Medicine in 1898. He took his interne work at the Cook County hospital in Chicago, and came to Ashland to start the practice of medicine in 1903. In addition to being a physician Dr. Wenzel was also a licensed druggist.

Dr. Wenzel was a member of the Ashland-Bayfield-Iron County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. Surviving are his wife, one son and one daughter.

SOCIETY RECORDS

NEW MEMBERS

Moran, C. J., West Salem.
Quinn, L. H., 1 So. Pinckney St., Madison.
Pratt, Helen E., Summit Hosp., Oconomowoc.
Newberry, C. L., 1050 Holton St., Milwaukee.
Murphy, James A., 94 Center St., Milwaukee.
Grab, John A., 830 Michigan St., Milwaukee.
Erps, Benjamin, 353 33rd Ave., Milwaukee.
Enzer, Norbert, Mt. Sinai Hosp., Milwaukee.
Rupp, Paul H., 605 51st St., Milwaukee.

CHANGES IN ADDRESS

Hanko, Mary E., East Orange, N. J., to 513 First Ave., Asbury Park, N. J.
Verbrick, W. C., Appleton, to Wayside.
Malcolm, J. J., Edgar, to Wisconsin Veterans Home.
Cremer, Victor H., Galesville, to Tomah.

CORRESPONDENCE

DEATH OF DR. SHELDON

Milwaukee Academy of Medicine, June 17, 1929.

Mr. George Crownhart,
Care Wisconsin State Medical Journal,
119 E. Washington Ave.,
Madison, Wis.

Dear Mr. Crownhart:

The enclosed resolution on the death of Dr. Sheldon was submitted at the meeting of the Academy of Medicine on June 11th, and in accordance with the action taken is being sent to you.

Very sincerely yours,
D. E. W. WENSTRAND,
Secretary,
Milwaukee Academy of Medicine.

RESOLUTION OF THE MILWAUKEE ACADEMY OF MEDICINE ON THE DEATH OF CHARLES STUART SHELDON

BE IT RESOLVED, that in appreciation of his long years of invaluable service to the medical profession, his untiring and patient labors in developing the county and state medical societies and organizing the medical men of this state, and his loyal and unswerving devotion to the highest ideals of his profession, and in recognition of the irreparable loss sustained by the medical profession of Wisconsin with the passing of Charles Stuart Sheldon.

Let us recall at this time, as an inspiration to ourselves, and as a shining goal to those just entering this life of service to humanity, the significance of the loyalty, devotion, and quiet, but unceasing diligence that endeared Charles Stuart to his fellow practitioners. Unselfish and constant service to others was his joy in life. Unswerving allegiance and devotion to those ideals which constitute the code of ethics of our profession were his religion. In the end, his reward was the gratitude of suffering alleviated, and the possession of a singularly apt professional skill, together with the love, respect and veneration of all with whom he came in contact.

One of the founders, and always an enthusiastic and active member, of the State Medical Society, he rendered valuable services to the profession for a period of over twenty-five years as secretary of that society, and in 1913-1914 as its president. No one has done more to uphold the ideals of our professional ethics, and in none will their incarnation be found more clearly.

The great dream of Charles Stuart Sheldon was a medical profession made up of "educated gentlemen." This was his dream and hope. The greatest tribute which we, the living, can pay the memory of Charles Stuart Sheldon is to strive to bring ourselves within his own definition of a gentleman. He said: "A gentleman, you know, is a person who treats every one gently, kindly, more than all, justly, and with humane consideration." Charles Stuart Sheldon would be rewarded above all else within our power to give, to know that we believe that no one ever met the requirements of his own definition better than did Charles Stuart Sheldon himself.

Be it further resolved, that this resolution be spread upon the records of the Milwaukee Academy of Medicine, and that a copy be sent to the widow and to the Wisconsin State Medical Journal.

Respectfully submitted,
A. W. Gray (signed)
Oscar Lotz (signed)
John J. McGovern, Chairman (signed)

THE ROAD MENACE OF THE EPILEPTIC

Shorewood Sanitarium, Milwaukee, Wis.
June 1, 1929.

Editor, Wisconsin Medical Journal,
Madison, Wis.

Dear Sir:

During the past two months I have treated as outpatients two boys, each twenty years of age, who suffered from major and minor attacks of epilepsy. Each drove an automobile in the ordinary routine of his occupation. One boy had recently smashed into a telegraph pole while in an attack. The other had fallen off his automobile on a number of occasions in an epileptic convulsion. Consultation with the district attorney and the secretary of state elicited the information that there was no law on the statue books covering this condition—that there was no way of preventing epileptics from driving automobiles under our present method of issuing licenses if they chose to falsify in their application for a driver's license. Again, the right of privilege as it applies to court procedure and the ethics of our profession as universally understood do not permit physicians to report the names of and the nature of the maladies from which their patients suffer, except as provided for in the legislature, and epilepsy is not included in this category. This should be a matter of law and not a priestly duty of the physician to report the trouble without legal authorization. There are undoubtedly many epileptics driving automobiles at the present time; and there is no doubt whatever regarding the danger to the public, pedestrians and drivers from this class.

It is obvious that in neither case was there any moral or legal right to drive an automobile on the public highways. The safety to others as well as to themselves ought to have been a sufficient incentive to engage in an occupation not entailing this hazard. However, they were mere boys, and with the characteristic attitude of the epileptic, arguments were of no avail—even consultation with their parents had little effect. These boys insisted that life was not worth living if they could not drive. It has occurred to me that if the legislature could make it mandatory upon the physician to report all cases of epilepsy coming under his observation in the same way that certain infectious diseases are now reported, some check-up might be made upon them; and if this information is passed over to those issuing licenses the situation could be controlled in a refusal to grant a

driver's license. Might it not be wise and is it not an obligation of the medical profession of our state to take cognizance of this condition, and as well take the initiative in its correction?

These remarks are made for the purpose of calling attention to a condition which exists and inviting discussion with the end in view that some corrective legislation may be forthcoming either as indicated above or in a more stringent method of examining applicants for an automobile driver's license.

Yours very truly,
Frank C. Studley, M. D.

Wisconsin expended $296,059.61 for blind pensions in 1928, according to the figures released from the State Board of Control's audit. This amount represents an increase of over $31,000 over the amount expended last year. Of the total amount expended, the State appropriated $50,000 and the counties paid $246,059.61.

The total reported blind population of the state was 2,761 and the audit reveals that 1,201, or 3 per cent, were receiving pensions, of which 743 were males and 458 females. There were 1,001 continued and 200 new pensioners on the rolls in 1928. The conjugal condition of the pensioners shows that 439 were married, 418 single, 276 were widowed, 33 separated, 27 divorced, and 8 were unknown. The age of the pensioners varied from 18 years to that of 102 years. The majority of the pensioners seemed to fall in the group 70 to 80 years. As to their birthplace, 852 were American born and the remainder born chiefly in Germany, Norway, and England.

The audit further reveals that the State's appropriation of $50,000 was pro-rated, each county receiving about 17 per cent of the amount they expended instead of the 33⅓ per cent which the law contemplated should be paid. The average pension in 1928 amounted to $246.51, or $20.54 per month.

* * *

Governor Walter J. Kohler vetoed the Blanchard bill assessing a $1 license fee on all resident fishermen in Wisconsin. The governor held that it would inconvenience many persons and that it was not wanted by the people generally. This ends the move to license fishermen at the session.

* * *

According to John Callahan, state superintendent of schools, practically every school boy and girl in Trempealeau county has been introduced to at least one of the important trees of the old "pineries." Through the cooperation of County Superintendent of Schools Tillie C. Sylfest and County Agent W. S. Comings, every one of the 101 rural schools was supplied with a specimen for planting on the school grounds. Comings and Miss Sylfest are planning to have each rural school supplied with a few pines from the state nursery.

* * *

The present session of the legislature will not place a tax on cigarettes. The Teasdale cigarette tax bill carrying a referendum provision, which had been advanced in the senate, is now definitely dead with the upper house reversing itself on this measure.

* * *

Wisconsin's taxes on real estate have increased nearly 50 per cent since 1920, the state tax commission reports.

The total real estate tax amounted to $50,760,339 in 1920 with an increase every year since with the total amounting to $73,042,484 in 1928. The levy for 1929 is expected to show a proportionate increase.

During this period the assessed value of the property jumped from $1,743,283,801 to $2,369,800,196 and the tax rate went from .0291 to .0308.

Wisconsin citizens paid a total of $227,742,550 in all taxes in 1927 and while these figures have not been compiled for 1928 they will probably show another decided increase.

* * *

Telegraph companies cannot be held for the transmission of libelous messages over their wires, the Supreme Court held in a suit brought by Lawrence Flynn, Outagamie county, against the Western Union. Where the message only passes between the sender, agents of the company and the receiver, there is no publication that creates liability. It is only when the message is exhibited to others than employes handling it that any liability is created on the part of the company.

* * *

The state board of control is planning a new experiment in the handling of feeble-minded patients. It is asking an appropriation of $10,000 with which a house would be established to take care of a number of these patients. They would go out in the city to work and would return to their state-maintained home. Their earnings would be used to support them. The start will be made in a small way with the prospect that this system will be extended if it proves successful.

* * *

The state prohibition department went out of existence May 31 when R. W. Dixon, former prohibition commissioner, called together his staff of fifteen and dismissed them from state service. With the closing of the department when Gov. Walter J. Kohler signed the bill repealing the dry law, $5,000 remaining in the prohibition department funds was turned back to the general treasury and the department's eight automobiles are awaiting disposal to some other department.

While the prohibition department was abolished as a wet and dry fight it is part of a general movement in the state to turn control of local affairs over to the localities themselves. Cities and villages have the power to enact any kind of a prohibition code they want to now and enforce them as they see fit with the aid of the federal authorities.

* * *

The legislative finance committee has evolved a new

plan to bring much needed additional funds for the many demands for money made on the state treasury. This plan calls for doubling all of the tuition fees at the university, raising about $630,000 more. There is considerable opposition to the plan. Doubling the fees is made part of the general university financing problem.

* * *

The Blanchard bill setting the fall primary election date on the third instead of the first Tuesday in September has been approved by Governor Kohler and now becomes a law.

* * *

The assembly has killed the Cashman bill providing for two years of advanced courses in all rural schools. The measure had passed the senate. The bill was killed on the claim that it would be too expensive and also that it was unworkable. Senator John Cashman, Denmark, author of the bill, contended that many farm children are not in a position to go away to school and therefore their education automatically ceases when they have taken all the little school has to offer. His plan was to have each of these schools offer two more years of learning.

* * *

Reorganization of the Wisconsin real estate board, which came into existence in 1920, will probably be made by Governor Walter J. Kohler early in July. While a reorganization of the board was one of the main reasons for the passage of the bill, the legislature has seized upon the opportunity to strengthen the present law. The bill provides for the appointment of three members by the governor and gives that body increased power, including a restoration of the right to begin investigations on its own intiative. During the past two years these investigations could only be made by the board upon a complaint being filed with it.

* * *

The first president of the Wisconsin Mothers' association is Mrs. R. S. Owen, Madison, who was chosen at the organization meeting in the Memorial union of the University of Wisconsin recently. Mrs. Sam T. Swansen, Milwaukee, was elected vice-president, and Mrs. L. E. Zimmermann, Hartford, secretary-treasurer.

The organization will have a large part in planning future mothers' week-ends at the university. The membership of the association will be composed of mothers and guardians of all regularly enrolled students in the university.

* * *

William E. Mauthe, chairman of the state conservation commission, has offered twelve proposals to relieve the forestry problem in Wisconsin. The program follows:

Let the federal government take over 2,000,000 acres of land not suitable for agriculture for the establishment of forests.

Legislate to establish state forests on 7,000,000 acres of forest land.

Encourage counties to establish county forests on delinquent lands.

Broaden the forest crop law. Extend fire prevention activities over the entire forest area. Establish a million dollar reforestation and fire protection fund.

Create a permanent forest research unit. Require scientific and selective timber cutting. Require slash removal.

Hasten a systematic soil survey in every forest growing county. Develop the interest of the people in forestry until they become forestry conscious.

* * *

The legislative finance committee has inaugurated a new policy under which the legislature will no longer dictate what buildings should be erected at the various institutions but will leave this question directly in the hands of the boards that are in charge of the various branches.

Under the new plan the finance committee has made no effort to decide what buildings should be erected during the next two years at the Teachers' colleges, University and institutions under the board of control. Each of the boards will get a lump sum for buildings and it will be up to the boards to use this money to fill its most pressing needs.

* * *

A total of $93,000 was spent in rehabilitation work in northern Wisconsin following the tornado on April 5, Adjutant General Ralph M. Immell reported on June 15. Of the total amount spent $46,986 was spent for buildings and repairs where the storm had wrecked structures.

* * *

Interest in fur farming is increasing rapidly in Wisconsin and many tracts of land suitable for this purpose have been sold at good prices recently, according to Oscar Gunderson, head of the state immigration division.

The state has 1,154 licensed fur farms in the state. Besides this group there are 232 fox farms that require no license. The state also has a great many rabbit farms that produce both meat and fur.

* * *

Governor Walter J. Kohler's program for a three-cent gasoline tax to build up a state fund for a through road system and to return greater amounts of aid to counties was placed before the finance committee, but legislators differed on a number of provisions carried in the administration bill.

J. B. Borden, formerly secretary of the finance committee and now on the governor's staff, explained the provisions of the administration bill. The additional cent tax would increase highways funds by $3,500,000 next year, he said, setting up for the year 1929-1930 a state fund of $5,878,250 for through roads. The increase in revenue would be distributed on the basis of 37½ per cent to the through road fund and the rest would be returned to the counties.

The total highway fund this year was $19,282,000 while under the increased gas tax it is estimated at $24,540,000 next year.

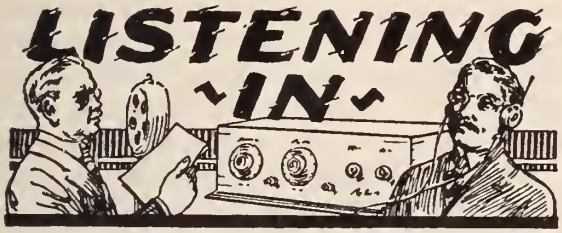
* * *

Money belonging to the State in the state insurance fund can be used for construction of a new state building, Senator Walter S. Goodland was informed by the attorney general.

On the basis of this opinion, a bill appropriating $1,250,000 of this fund to be used in purchase of a site and erection of a state office building is expected to be drafted soon. Senator Goodland is chairman of the legislative committee investigating the feasibility of the building project.

A state traffic code will become a reality if Governor Kohler attaches his name to a senate bill in which the assembly concurred late in June.

The major provisions of the bill are a forty-five mile per hour speed limit on state highways and uniform provision for traffic regulation in the cities and villages of the state. The code will replace an ineffective one passed by the 1927 legislature.



NARCOTIC PRESCRIPTIONS

Physicians who sign prescriptions for narcotics should be sure to sign their full name on the prescription blank instead of just Doctor Smith, or Doctor Jones, is the warning of the federal narcotic agents who declare that a number of Wisconsin physicians are careless in this respect. The federal officers also wish to remind the membership that narcotic prescriptions should not be written with lead pencil. They may be written with indelible pencil, or preferably with pen and ink.

NEW LAY SECRETARY

Spending a day at State Society headquarters, Mr. Harvey Sethman, new executive secretary for the Colorado State Medical Society, was enthusiastic on the Wisconsin service for members. Mr. Sethman was especially interested in the Packet Library service at the Extension Division which now employs four assistants in order to fill the average number of requests weekly, which exceeds 100.

TARIFF INCREASE

In accordance with a request from the Secretary's office, several hundred members have written their United States Senators protesting against the proposed increase in the tariff schedule on surgical instruments. Both Senators LaFollette and Blaine have indicated that this will receive their very serious attention when Congress reconvenes in the early fall. Latest advices are that the tariff will not be taken up in the United States Senate until October. It has already passed the House.

SECRETARIES' CONFERENCE

Following the lead of Wisconsin and Michigan, Indiana now plans to hold the annual secretaries' conference at the headquarters of the American Medical Association. The Indiana conference will be held during 1930.

MORE STRICT REQUIREMENTS

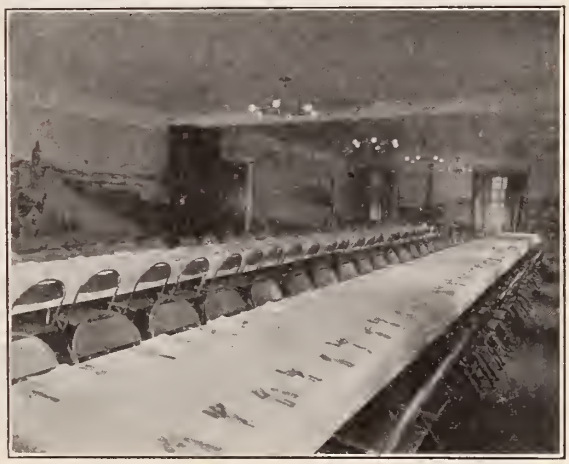
Pennsylvania, Wisconsin and New Jersey are the three states that now require that applicants for membership be certified to the American Medical Association before being voted upon by the local county society. Upon such certification the Department of Investigation of the A. M. A. advises the county society of the previous history of the individual, and thus the society has material that it could not otherwise obtain, when the time comes to vote upon the application.

Medical Economics to be Included in Program for 88th Annual Meeting at Madison in September; Program Nears Completion

As a result of a questionnaire sent to the general membership, upwards of 500 members have asked that at least three subjects on medical economics be included in the general sessions for the 88th Annual Meeting at the Memorial Union building, Madison, on September 11th, 12th and 13th. While the original plans called for an extra day devoted to topics in this field, it has been decided to limit the topics to three to be placed on the program for Wednesday morning, September 11th, the first day of the general sessions.

Dr. Olin West, secretary and general manager of the American Medical Association, will address the members on the first morning on "Opportunities in Practice." Other subjects chosen are Legal Medicine in Wisconsin and Collections and Collection Methods. Mr. Fred M. Wylie, Madison, for six years adviser of the society on the relations between law and medicine, will present information on the important relationships that affect every physician, and a nationally known expert has been invited to address the society on the remaining subject.

While the preliminary program will not be published until the August issue of this Journal, Dr. W. G. Sexton, Marshfield, chairman of the program committee, has announced the following



One of the symposium rooms.

subjects and speakers for the general sessions and the special round table discussions: Dr. George Heuer, professor of surgery, University of Cincinnati, "Heliotherapy in Medicine and Surgery;" Dr. Joseph Barcroft, professor of physiology, of Cambridge, England; Dr. C. C. Edmondson, Waukesha, "Diabetes;" Dr. James C. Sargent, Milwaukee, "Hematuria;" Dr. E. L. Miloslavich, Milwaukee, "Fat Embolism;" Dr. Arnold S. Jackson, "Thyroid Disease;" Dr. Ralph M. Waters, Madison, "Spinal Anesthesia;" Dr. F. F. Hirschboeck, Duluth, "Massive Atelectasis of the Lungs;" Dr. William S. Middleton, Madison, "Anaemias;" Dr. William N. Nesbit, Madison, "Bronchoscopy;" Dr. Charles G. Sutherland,

Memorial hall in the Union building.

Rochester, Minn., "The X-Ray Diagnosis of Duodenal Ulcer;" Dr. John Pink, Milwaukee, "Oxygen Treatment of Pneumonia;" Dr. Francis D. Murphy, Milwaukee, "Cardiac Decompensation," and Dr. John H. Musser, New Orleans, La., "The Normal and the Diseased Heart."

Striving to develop more discussion of problems important to all practitioners in the state, the program committee has arranged for round table discussions on Thursday and Friday mornings. Six large rooms in the Memorial Union building will be devoted to these simultaneous discussions with two scheduled for each room each morning. Members in attendance will thus be able to join such discussions as they wish, each morning, to cover such subjects as may be most interesting to them. The round table discussions will allow for a thorough presentation of the subject by an invited speaker and a half hour to forty-five minutes for a general discussion by those present in the group. Each morning will be divided into two periods, with a rest period in between so that members may attend a discussion in one room for the first period and attend another discussion in another room for the second period. In many of the discussionals, clinic material will be presented to illustrate the points as the discussion advances, according to Dr. Sexton.

OUTLINE OF MEETING

On Tuesday, September 10th, the annual golf tournament will be played in the afternoon, preceded by practice rounds in the morning. Dr. Ray C. Blankinship, of Madison, has been appointed by President Doege as chairman of the committee in charge of this annual event. At 2:00 Tuesday afternoon the Council will hold its first session at the Memorial Union building and the House of Delegates will convene at the building at 7:00 Tuesday evening. Many important questions will be presented before this session of the House which will have as its guest of honor Dr. Olin West, secretary of the American Medical Association. At the Tuesday evening meeting councilors will be elected to succeed Dr. Edward Evans, La Crosse; Dr. T. J. Redelings, Marinette; Dr. Joseph F. Smith, Wausau, and Dr. H. M. Stang, Eau Claire, all of whose terms expire at this meeting. A councilor will also be elected for the fifth district, which includes Manitowoc, Sheboygan, Calumet and Washington-Ozaukee counties for the unexpired term of Dr. J. L. Shaw, of Manitowoc, resigned. Other officers to be elected at the Tuesday evening session include a delegate to the American Medical Association to succeed Dr. Joseph F. Smith, Wausau, and an alternate to succeed Dr. R. E. Mitchell, Eau Claire, both of whose terms expire. Election of other officers will be held at the Thursday morning meeting of the house.

Committee reports and recommendations will also be acted upon at the Tuesday evening session and other recommendations at the Wednesday evening session of the House. All committee re-

ports and recommendations will be printed in the August issue of the Journal.

The general sessions of the Society will open in Great Hall at the Memorial Union building at 9:00 Wednesday morning, September 11th, and the second general session will be held at 1:30 that afternoon. The House of Delegates will convene at 7:00 Wednesday evening for its second session and at 8:30 Wednesday evening a smoker will be held in the Rathskellar and Trophy room of the Memorial Union building.

Alumni luncheons for the alumni of Rush, Northwestern, Michigan, Wisconsin, Marquette, Pennsylvania, Chicago P. & S. and Illinois will be held in the building on Thursday noon and simultaneously, wives of the members will meet in the building for a luncheon and subsequent organization of a Woman's Auxiliary. Following the organization meeting the wives of the members will play bridge during the afternoon and on Thursday evening will attend, with the members, the annual dinner.

Thursday and Friday mornings will be devoted to the special round table discussions with general sessions on Thursday and Friday afternoons.

Commercial exhibit reservations for the nineteen exhibitors have already been made. The commercial exhibit section will occupy the central hall on the main floor of the building. Exhibitors will include:

Abbott Laboratories, North Chicago.
Burdick Company, Milton.
Deshell Laboratories, Chicago.
Dry Milk Company, New York.
Hanovia Chemical & Mfg. Co., Newark, N. J.
Horlick's Malted Milk Corp., Racine.
E. H. Karrer & Co., Milwaukee and Madison.
Kelley Koett Mfg. Co., Covington, Ky.
Kremers-Urban Company, Milwaukee.
Mead Johnson & Co., Evansville, Ind.
Medical Protective Company, Chicago.
Mellin's Food Company, Boston, Mass.
Pengelly X-Ray Company, Milwaukee and Minneapolis.

The Rathskellar where the smoker will be held.

Roemer Drug Company, Milwaukee.
Saunders Company, Philadelphia.
Spencer Lens Company, Chicago.
E. R. Squibb & Sons, New York.
Victor Mueller Company, Chicago.
Victor X-Ray Corp., Chicago and Milwaukee.

Appropriation Bill to Investigate Quackery in State Passes Assembly and Senate; State Permit Abolished

Despite a last minute attack in the senate, Bill 247-A appropriating $5,000 a year for two years to the State Board of Medical Examiners to permit them to employ a full-time investigator of quackery in the state, was passed in the senate on June 13th by a vote of 17-13. At the time this article is written the bill is before the governor.

The bill had reached the senate and was advanced in that body early in June without discussion. When it came up for final passage, Senator Caldwell, Lodi, moved for its killing and those supporting the measure being temporarily absent from the floor, the bill was killed within a minute. On the next legislative day Senator Casperson, Frederic, secured unanimous consent for its reconsideration and the bill then went over to June 13th. When the bill was reached on the 13th, Senator Caldwell again moved that it be non-concurred in, stating that it was a measure that had been in at least four sessions of the legislature and killed each time (1). A roll call was demanded and Senator Caldwell's motion was defeated by a vote of 12-16. The bill was then read for final passage and passed by a vote of 17-13. The roll call follows:

For passage: Senators Blanchard, Edgerton; Boldt, Sheboygan Falls; Duncan, Milwaukee; Hall, Green Bay; Johnson, Superior; Keppel, La Crosse; Mehigan, Milwaukee; A. M. Miller, Kaukauna; Morris, Milwaukee; Otto Mueller, Wausau; Polakowski, Milwaukee; Roberts, Madison; Roethe, Fennimore; Rush, Neillsville; H. H. Smith, Milwaukee; P. J. Smith, Eau Claire, and Teasdale, Sparta—17.

Against the bill: Senators Barker, Antigo; Caldwell, Lodi; Cashman, Denmark; Daggett, Milwaukee; Fellenz, Fond du Lac; Goodland, Racine (2); Hunt, River Falls; Hutchison, Mineral Point; Markham, Horicon; Schumann, Watertown; Severson, Iola; Shearer, Kenosha, and White, Winneconne—13.

1. Sen. Caldwell was in error in his statement. The bill passed both senate and assembly two years ago for the first time, with but twelve dissenting votes in both houses, but was vetoed by Gov. Zimmerman.

2. Sen. Goodland voted for this bill in the senate committee on Education and Public Welfare of which committee he was chairman.

Just as this Journal goes to press it is learned that Gov. Kohler has signed the appropriation bill to weed out quacks in Wisconsin.

Absent and not voting: Senators Carroll, Glidden; Casperson, Frederic, and Gettelman, Milwaukee—3.

STATE PERMITS REPEALED

As stated in a last minute item in the last Journal, Gov. Kohler signed the general prohibition repeal act which includes the repeal of physicians' state permits at $10.00 a year. The repeal became effective at once so that no future state permits will be required.

The permit bill was first passed in 1921 when the State Society had no representation before the legislature. At that time combined permits cost the physician $40.00 a year. In subsequent sessions the State Society brought the permit cost down to $10.00 a year and had eliminated three of the required permits. At this session bills were introduced providing for the absolute repeal of the physicians' permit and while opponents of the repeal declared that physicians had so violated the act that they were not entitled to repeal, representatives of the State Society pointed out that every member of the society was in good standing and the permit bills were advanced in both houses simultaneously through the actions of Senator Mehigan, Milwaukee, and Assemblyman J. D. Millar, Menomonie, and were subsequently included in the general repeal bill which Gov. Kohler signed.

COUNTY HEALTH DEPARTMENTS

That counties may, at their option, establish county health departments with a county health officer in charge, appears probable, as a bill to affect that purpose has passed the assembly and has been advanced in the senate. This bill is sponsored by the Board of Health and appears likely of passage this year after defeat in two previous sessions. The terms of the bill are entirely optional with each county and the county may establish such a department upon the basis of its own funds or upon the basis of gifts. Under further

requirements of the measure, all county health officers must be approved by the State Board of Health.

Charity patients who are accepted as such at the State of Wisconsin General Hospital, but who subsequently recover an earning capacity, will be required to pay for their hospital services if a bill to that effect receives approval of the governor. The measure was supported by the state hospital authorities and was introduced at the request of Assemblyman Don B. Smith, of Jefferson.

A bill bringing to date the territorial charter of the State Medical Society, issued by the territorial legislature of 1841, introduced for the society by Assembyman McDowell, M. D., has now passed both houses of the legislature and has received approval of the governor. A companion measure giving legislative authority for the establishment of a State Society endowment fund has passed the assembly without opposition and is expected to pass the senate, in which body it is now pending.

CANCER QUACK DEFEATED

By far the most amusing incident of the session was the appeal of a cancer quack of Chippewa Falls, under suspended sentence in that city for violation of the medical practice act, to secure from the legislature a special license permitting him to treat the sick. This gentleman visited four separate assembly committees in an effort to have his measure introduced and in each case the committee was advised of the gross fraud that was intended, and each committee refused to bring in the measure, supporting the position of the State Medical Society. Had the bill even been brought into the legislature, it is probable that the quack would have secured that which he desired in the way of national advertising through the introduction of such an unusual request.

A Day With the Secretary of the State Medical Society

By MR. J. G. CROWNHART
Madison

So widely varied are the activities of the secretary of your State Society, that each day presents some phases of the work quite different from those of the past. Yet the correspondence of one day is, in a general way, typical of others and thinking that the reader may be interested in more intimate details of his Society's work this sketch is presented. Each letter and important detail of a single day was noted so that the reader might know exactly that which transpired.

As the mail is opened this morning, those letters containing remittances for dues are turned over to Miss Florence Ripley, who handles that phase of the secretarial duties. Today we have ten letters of this type together with three indicating change of address. A large packet of clippings relating to physicians, quack advertising, and the general subject of medicine, clipped from yesterday's daily press from all parts of Wisconsin go to the desk of Miss Astrid Jurgens. Here they are being sorted to form the base of news items in the Wisconsin Medical Journal and material for the investigation files. While the two assistants are doing this preliminary work of the day, let us look at the letters on the Secretary's desk.

The first is a letter from a member who wishes to extend his practice to include the testing of vision. He asks the names of reputable optical houses and further inquires as to the best recent scientific publications relating to this field. The names of reputable houses take but a moment to dictate. Then a phone call to Miss van Zandt of the Packet Library Service of the Extension Division of the University. Will Miss van Zandt send the Doctor five or six of the best recent books on this subject for a two weeks' loan? They will be sent at once. Thus will the member have the opportunity of reading these books and selecting from them such as he will wish to order for his permanent use. Miss van Zandt tells us that this service, established at our instance, is now filling over 100 requests a week, and that several members have told her that this has meant the elimination of a commercial service that cost $15.00 a year.

We are interrupted by a telegram that the new tariff bill will very materially increase the cost of surgical instruments. This has been anticipated by a questionnaire to the Council and with their authority, wires are immediately sent to each Wisconsin member in Congress urging that the tariff on surgical instruments be not increased and citing reasons for the position taken by the State Society. Then we dictate a letter to follow the tele-

gram explaining in detail the position of the Society and expressing the hope that this feature of the proposed tariff law may be eliminated.

Back to our correspondence again. Dr. Blank wishes to know of possible locations for practice in Wisconsin. A file on that subject suggests three locations in small towns and one in a large city. We offer to search further if these prove unsatisfactory.

Dr. Jones submits an article for the Journal Clinic. This we acknowledge and then re-mail to Dr. Lotz of the Editorial Board for approval by the Board.

Mrs. Smith, the widow of Dr. Smith, sends us an exchange advertisement for the next Journal. The check to cover cost of insertion is returned for Dr. Smith was a member at the time of his death.

Here is a cordial invitation to attend a meeting of the Grant County Society. We are sorry but during the legislative session it is not possible to promise attendance. It is altogether probable that we may have a committee hearing on that day so we can only say that we will come if we can, and suggest that possibly a meeting later in the summer will be satisfactory.

The Civil Service Commissioner at Washington advises us that Dr. Black is an applicant for a position on the Federal Classified Service. What information can we furnish? Is he a member? We find that we know Dr. Black personally, and write that not only is he a member of his county and state societies and the A. M. A., but he is the author of several articles in the Wisconsin Medical Journal, and is known to us personally as one of unquestioned standing and ability.

Mrs. Redson writes that she has seen a state society press story on cancer. Can we send her additional information? We send the pamphlet on this subject prepared for the laymen by the American Society for the Control of Cancer. Another letter from the superintendent of schools of Milwaukee stating that our press service is so widely quoted that he would like to receive a copy of each article. We are glad to do this, and make a notation that possibly the service should be sent to all higher schools when funds are available.

Here is an article for the Journal approved by the Editorial Board. The author will be interested to know that it is accepted so we drop him a note to that effect, adding the probable publication date.

Two exhibit reservations for our September annual meeting are acknowledged, as well as an order for reprints which is forwarded to our printer.

MEDICAL CONTRACT EXAMINED

This is an interesting letter. A member in the central part of the state writes us that he is solicited to become an appointee of an accident and health insurance company of Milwaukee. He submits the proposed contract and asks what we think of it. Happily our counsel just drops in to check up on a new bill and together we discuss the contract. And here is the reply:

Dear Doctor:

I have before me a blank "medical card contract" between the Company, a corporation, of Milwaukee, Wisconsin, and a physician, which you submitted to me for an opinion.

The contract provides that the physician shall receive $1.50 for each card issued by the insurance company to a policy holder entitling the policy holder to medical treatment from such physician, exclusive of surgical operations, but apparently including hospital service where required, for a term of one year, and that the physician shall provide such policy holder medical treatment provided in his policy.

It would be interesting to have a copy of a letter or a resumé of the arguments of the insurance company by which it seeks to induce physicians to enter into this contract. We may safely presume however, that it is represented to the physicians that they will receive $1.50 upon many policy holders for whom they will not be called upon to render any service, and thereby will receive compensation for the services in excess of $1.50 which they render to certain other policy holders. We may also safely assume that the insurance company is receiving a profit upon such policies and that, therefore, the policy holders are paying in the aggregate more for medical service than the physicians are receiving. It would, no doubt, be a very advantageous arrangement for the insurance company for it would know absolutely in advance the cost to it of such medical treatment under its policies. It is entirely probable that the company is collecting far in excess of $1.50 per policy holder for this service.

The principles of medical ethics of the American Medical Association, article 6, section 2, under the title "Contract Practice," reads:

"It is unprofessional for a physician to dispose of his services under conditions that make it impossible to render adequate service to his patient or which interferes with reasonable competition among the physicians of a community. To do this is detrimental to the public and to the individual physician, and lowers the dignity of the profession.

"(By the term 'contract practice' as applied to medicine is meant the carrying out of an agreement between a physician or group of physicians, as principals or agents, and a corporation, organization or individual, to furnish partial or full medical service to a group or class of individuals for a definite sum or for a fixed rate per capita.)"

The vice of this sort of a contract where in no event will the physician be receiving more than nominal compensation in any one case, and where he may very likely be receiving little more than nominal compensation in the aggregate for the services the contract requires him to perform, in its effect upon the time and attention given to the patient and the quality of the service rendered, is obvious. That it is condemned by the principles of medical ethics is sufficient.

This proposed contract of the Insurance Company has still other vices. It provides that the physician shall "keep careful watch and supervision on all of the policy holders treated by him who have pending claims against the company and use his best endeavors to detect and prevent all dishonest claims of malingering." The physician is in a position of the utmost trust and is charged with the utmost fidelity to the best welfare of his patient. He cannot divide his allegiance between the patient and any other person, interest, or corporation, particularly not an adverse party. He is ethically bound, except in some few instances of public policy to keep in strictest confidence the information obtained by him from the patient, by word of mouth, or otherwise, for the purpose of treatment, and he can not be at one and the same time physician and detective, nor can he be ethically physician one moment or day and detective the next, as this contract would require.

The proposed contract goes on to provide that the physician "also agrees to give his best professional service in adjusting claims of policy holders treated by him, subject to the instructions and supervision of the company; also to render to the company professional service as requested, at all times." Here the physician is specifically required to be the agent of the adverse party in adjusting the claim of his patient against such party and to fully disclose to the adverse company professional advice upon the same.

The proposed contract also, in requiring the physician for the same compensation, make out notices and proofs of claim, probably requires him to perform legal service contrary to the statutes regulating the practice of law. Physicians are not qualified to determine the notices and proofs required by the policy any more than lawyers are qualified to determine the medical treatment required by the patient, and the rights of the policy holder may well be lost through this lack of qualification, unless defects be held to be waived by the company because the physician was the agent of the company, thereby but emphasizing the impropriety of the position in which this proposed contract places the physician.

It is my opinion, therefore, that this proposed contract is, for the physician, improvident, unethical, and perhaps illegal, for the following reasons:

1. The physician probably will be grossly underpaid and may be required to disburse for hospital and supplies more than his entire compensation under the contract.

2. It is contract practice contrary to the principles of medical ethics.

3. It requires the physician to be a detective against the interests of his patient as to the subject matter of the confidential relations.

4. It requires the physician to disclose to the company confidential information obtained by him in treating the patient, so that such information may be used adversely to the patient's interests.

5. It requires the physician to perform services outside his profession and for which he is not qualified, perhaps to the detriment of the patient's interests.

6. It makes the physician the employe of another than the patient, contracting his first fidelity to such third party in case of adverse interests.

In general, such a contract is subversive of the public health, and the best interests of the policy holders of this company, because, except in instances of careless agreement, only the poorest type of physician would enter into such an agreement, thereby causing the policy holders to rely for their health supervision and medical treatment upon the least qualified of the profession.

ANOTHER TELEGRAM

Another telegram. This time a member has allowed his membership to lapse and now an appointment hinges on his ability to produce his membership certificate tomorrow. We wire instructions to the member to pay his delinquent dues to his local secretary at once and we send the secretary his membership certificate so that it may be delivered promptly upon the payment of the amount indicated.

Now a telephone call from a member who wants to see us at ten tomorrow.

And the last letter of the morning,—from a member who has seen his local legislator who is a member of a committee that will pass on a very important piece of health legislation. The member states that he had a nice interview, explained the bill and its purpose in some detail, and that the legislator indicated that if he found nothing of adverse nature he would be glad to lend his support. How encouraging is such a letter when the result was previously doubtful!

Before running over to the Capitol we skim through half a dozen exchange journals to see what may be of interest to us. One journal we lay aside to read an article on group practice. An ad is torn out of another as indicating a possible advertiser for Wisconsin. The other journals go directly to packet library service for their use and the retained journal will follow as soon as we have read it.

While our letters are being typed we walk over to the Capitol a block away. There we ascertain that the committee before which we appeared yesterday afternoon has reported favorably on our bill. (This is not always the case). We check our new bills that have been introduced and look over

(Continued on page XXVI)

THE JOURNAL BOOK SHELF

The Technic of Local Anesthesia. By Arthur E. Hertzler, M. D., professor of surgery in the University of Kansas. 4th edition with 146 illustrations. Price $6.00. C. V. Mosby Co., St. Louis, 1928.

Regional Anesthesia. By Gaston Labat, M. D., clinical professor of surgery, University and Bellevue Hospital Medical College, New York City. With a foreword by William J. Mayo, M. D. Second edition, revised. Octavo of 567 pages with 367 original illustrations. Price $7.50. W. B. Saunders Co., Philadelphia and London, 1928.

The Climacteric (The Critical Age). By Gregorio Maranon, professor of medical pathology in the Madrid Gen. Hospital, member of the Royal Nat'l. Academy of Medicine. Translated by K. S. Stevens and edited by Carey Culbertson, M. D., associate clinical professor of obstetrics and gynecology, Rush Medical College of the University of Chicago. Price $6.50. C. V. Mosby, St. Louis, 1929.

Imperative Traumatic Surgery with Special Reference to After Care and Prognosis. By C. R. G. Forrester, M. D., consultant, teaching staff, Illinois Post Graduate School, Chicago. Illustrations, 598. Price $10.00 net. Paul B. Hoeber, Inc., New York, 1929.

Physiology of Bone. By R. Leriche and A. Policard. Translations by Sherwood Moore, M. D., and J. Albert Key, M. D., of Washington University School of Medicine. Illustrated. Price $5.00 C. V. Mosby Company, St. Louis, 1928.

The Elements of the Science of Nutrition. By Graham Lusk, professor of physiology at the Cornell University Medical College, New York City, 4th ed., reset. Octavo of 844 pages. Price $7.00 net. W. B. Saunders Co., Philadelphia and London, 1928.

Old Age. The Major Involution. The physiology and pathology of the aging process. By Alfred Scott Warthin, M. D., professor of pathology and director of the Pathological Laboratories in the University of Michigan, Ann Arbor. With 29 illustrations. Price $3.00 net. Paul B. Hoeber, Inc., New York.

Technique of Contraception. By James F. Cooper, M. D., medical director of the Birth Control Clinical Research Bureau, clinical instructor in Obstetrics, Boston University Medical School. Day Nichols, Inc., Publishers, 15 40th St., New York City.

Spinal Anesthesia. Principles & Technique. By Charles H. Evans, M. D., clinical asst., New York Post Graduate Medical School and Hospital. Illust., 41, with 3 in color and 1 folding colored plate. Price $5.50 net. Paul B. Hoeber, Inc., New York City.

Angina Pectoris. By Harlow Brooks. M. D., professor of clinical medicine, New York University. Price $2.50. Harper & Bros. Publishers, New York City.

BOOKS RECEIVED FOR REVIEW

A Manual of Diseases of the Nose, Throat and Ear. By E. B. Gleason, M. D., professor of otology, Graduate School of the University of Pennsylvania. Sixth edition, thoroughly revised. 12mo. of 617 pages with 262 illustrations. Cloth $4.50 net. W. B. Saunders Company, Philadelphia and London.

Youthful Old Age, How to Keep Young. By Walter M. Gallichan with an introduction by Thurman B. Rice, M. D., associate professor of bacteriology and public health, Indiana University School of Medicine. Price $2.50. The Macmillan Company, New York, 1929.

Gonorrhea and Kindred Affections. Gonorrhea in the Male, Chancroid and Verruca Acuminata by George Robertson Livermore, M. D., professor of urology, Medical Department, University of Tenn., and Gonorrhea in the Female and the Infectious Granulomata by Edward Armin Schumann, M. D., associate professor of obstetrics, University of Pennsylvania. Price $5.00. D. Appleton and Company, New York and London, 1929.

Surgical Pathology. By William Boyd, M. D., professor of pathology, University of Manitoba, Winnipeg, Canada. Second edition, revised and reset. Octavo of 933 pages, with 474 illustrations and 15 colored plates. Cloth $11.00 net. W. B. Saunders Company, Philadelphia and London.

The Nose, Throat and Ear and Their Diseases. In original contributions by American and European authors. Edited by Chevalier Jackson, M. D., professor of bronchoscopy and esophagoscopy in the University of Pennsylvania; George M. Coates, M. D., professor of otology, Graduate Schools of the University of Pennsylvania, and Chevalier L. Jackson, M. D., assistant in bronchoscopy and esophagoscopy, University of Pennsylvania. Octavo volume of 1177 pages with 657 illustrations and 27 inserts in colors. Cloth, $13.00 net. W. B. Saunders Company, Philadelphia and London, 1929.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Secretary, Mr. J. G. Crownhart, 119 E. Washington Ave., Madison, Wisconsin. These new books will be loaned for an inspection period only.

Diagnostic Methods in Internal Medicine. By Samuel A. Loewenberg, M. D., Assistant Professor of Clinical Medicine, Jefferson Medical College, and Assistant Physician to the Jefferson Hospital; formerly Assistant Professor of Physical Diagnosis at the Medico-Chirurgical College and the University of Pennsylvania, Pa. With 547 illustrations, some in colors.

The author has undertaken a Herculean task when he has endeavored to combine into one volume of 979 pages Physical Diagnosis, General Medical Diagnosis, Laboratory Diagnosis and Roentgen-ray Diagnosis. It can not be done. What he has given is a boiled-down abstract of all the subjects, which is of doubtful value to student or physician.

Suppose one wanted to look up Neoplasms of the Lungs. On pages 330 and 331 he would find 13 lines. Nephrosis, a rare condition, is given more than a page. The reviewer criticizes the illustration on page 581, technic for palpating in appendiceal region etc. Palpation of any part of the abdomen should be performed with the whole hand on the abdomen. Such an illustration is misleading. One can not palpate by jabbing the tips of the fingers on the skin. There are several pages devoted to "Acidosis" but nothing to "Alkalosis." This seems a grave omission.

This is not a book totally devoid of merit but it is

CAMP
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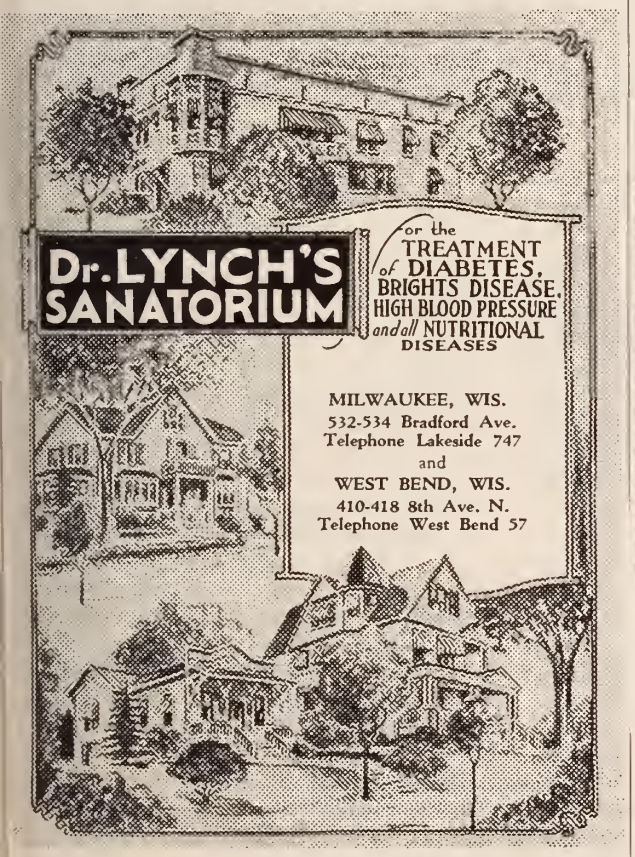

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too sketchy to be of value to anyone but a medical student when used in connection with demonstrations and clinics. However, we would be inclined to recommend other somewhat similar text books to the student.

The illustrations are numerous and well reproduced but many seem useless, especially those showing skin lesions. The bookmaking is well done.—L. M. W.

Diseases and Deformities of the Spine and Thorax. By Arthur Steindler, M. D., Professor and head of the Department of Orthopedic Surgery of Iowa State University Medical School, Iowa City, Iowa. With 76 plates. Cloth $12.50. C. V. Mosby Company, St. Louis, 1929.

Steindler's new book appears as a fit companion to his work on **Orthopedic Operations,** and deserves the same welcome that his earlier book received in this country and Europe.

With his splendid work on scoliosis as a leader, the book treats fully the important diseases and deformities of the spine and thorax. In this volume, treatment is given only its share of space, while etiology, pathology and symptomatology are excellently presented.

Congenital deformities are more fully described than usual. Faulty posture and its causes and effects are dealt with in the chapter on static deformities.

The discussion of scoliosis comprises the author's own famous work with a summary of the valuable contribution of other men. There are clear descriptions of the methods of Galeanzzi, Schulthess, Haglund, Abbott, and others. The treatment of scoliosis is brought up to date as it has been in no other recent book.

The recent voluminous literature on low back pain is well summarized. There are good presentations of diagnostic signs and the newer operations.

There are chapters on tuberculosis, syphilis, and osteomyelitis. Accurate evaluation of the newer developments is added to classic discussions of the conditions. Operative procedures are especially well dealt with.

The chronic (arthritides) of the spine are well classified and discussed in an exhaustive but practical manner. Names that are so frequently garbled are clearly used in differentiating types of involvment.

Tumors of the spine are briefly but clearly dealt with. A working classification is given. Many of the obscure types are discussed in a practical way. There are excellent bibliographies at the ends of the chapters.—H. C. S.

The Tonsils and Adenoids and Their Diseases. Including the part they play in systemic diseases. By Irwin Moore, M. B., late honorary surgeon to the London Throat Hospital for Diseases of the Throat, Nose, and Ear, Great Portland Street, and also to the Hospital for Diseases of the Throat, Golden Square, London. Cloth $6.50. C. V. Mosby Company, St. Louis, 1928.

This text book is an excellent guide to the practitioner as well as an extremely valuable book for the otolaryngologist. The book not only includes a thorough review of the literature but embodies the author's experience in the relation of tonsils and adenoids to general disease. The book consists of nine chapters.

In the first chapter it takes up the anatomy, histology, bacteriology, and general pathology.

The second chapter takes up the problem of the tonsil as a source of infection and the results obtained by tonsillectomy.

The third chapter takes up the different inflammations of the tonsils.

The fourth, the surgical removal of the tonsils. This chapter is of particular interest because not only are all the different methods gone into but they are taken up in relation to the historical background of the operation.

The fifth chapter deals with the complications following tonsillectomy.

The sixth, treatment of postoperative tonsillar hemorrhage.

The seventh, the treatment of diseased tonsils in which surgical procedures are contra-indicated.

The eighth chapter is given over to the adenoids.

The ninth, the lingual tonsil.

I feel that this book is one of the best that has come out on this subject in recent years. Not only does the author give his own experiences but has collected the observations and opinions of the leading otolaryngologists of the world and has presented them in conjunction with his own. The extensive bibliography which has been appended to each chapter is new and particularly noteworthy. No hesitancy is felt in recommending the book.—T. L. T.

Clinical Electrocardiograms. Their Interpretation and Significance by Frederick A. Willius, M. D. Section on Cardiology, the Mayo Clinic, Rochester, Minnesota, and associate professor of Medicine, the Mayo Foundation, University of Minnesota. Quarto of 219 pages with 368 illustrations. Cloth $8.00. W. B. Saunders Company, Philadelphia and London, 1929.

A very profusely illustrated text book on the interpretation of Clinical Electrocardiography. It is devoted to the interpretation of the electrocardiogram and its clinical significance. No discussion of the technique of Electrocardiography is found. A very complete bibliography is added. The volume will be found to be of considerable use to the internist, and indispensable to the student of cardiology. A worth while addition to our text books on this subject.—M. F. R.

The Textbook of Clinical Neurology. For students and practitioners. By M. Neustaedter, M. D., clinical professor in neurology, N. Y. Polyclinic Med. Sch. and Hospital. With an introduction by Ed. Fisher, M. D., professor emeritus of neurology, University and Bellevue Hospital Med. Col., N. Y. With 228 illustrations, some in colors. Price $6.00 net. F. A. Davis Co., Philadelphia, 1929.

This book will be found extremely useful by the medical student interested in neurology and for the general practitioner who is handling his own neurological cases. It is not primarily a book for the skilled neurologist but even here it will be found useful because of the unusual way of presenting the subject. The subject matter is taken up under certain symptom complexes and then the diseases which can produce such clinical pictures are then considered, very much as the neurologist has to do when he takes the history and makes his examination and then by a process of exclusion makes his definite

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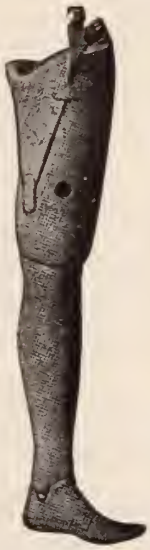

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diagnosis. Most of the excellent illustrations are new and are very valuable. All in all considered from the viewpoint of whom it was written primarily for, this is a very excellent book on organic neurology and can be recommended unqualifiedly.—B. B. R.

Annual Reprint of the Reports of the Council On Pharmacy and Chemistry of the American Medical Association for 1928. Cloth. Price, postpaid, $1.00. Pp. 75. Chicago: American Medical Association, 1929.

This book is a great deal more than a mere record of the negative actions of the Council on Pharmacy and Chemistry. It gives in full the reasons for the Council's rejection of various preparations, but it also records results of the Council's investigations of new medicinal agents not yet out of the experimental stage, and frequently contains reports on general questions concerned with the advance of rational drug therapy. All three categories of reports are represented in the present volume.

Among the reports on products that have been denied admission to New and Nonofficial Remedies are those on Sanarthrit and Telatuten, two preparations of animal tissue, of indefinite composition, proposed for use in arthritis and arteriosclerosis respectively; on Clauden, a combination of lipoids and undefined proteins, proposed for use as a hemostatic; on Hart's Alimentary Elixir of Beef, a liquid medicinal food, "fortified" with glycerophosphates; on Alucol, claimed to be colloidal aluminum hydroxide and marketed under this nondescriptive name; on Oxo-Ate and Oxo-Ate B, claimed to be the ammonium and calcium salts, respectively, of orthoiodoxybenzoic acid and marketed under these proprietary, nondescriptive names; on Terpezone, stated to be pinene ozonide and marketed with exaggerated and unwarranted claims; on Vitalipon, an unscientific and indefinite mixture of lipoids claimed to be extracted from "vegetable and animal embryonic organs;" on Kalak Water, a solution containing sodium bicarbonate with many other ingredients of questionable utility, marketed under a nondescriptive name with unwarranted therapeutic claims; on Eu-Med, Aerosan Tablets, and Thyangol Pastilles, three shotgun mixtures from Germany.

Among the preliminary reports are those on Metrazol, which has now been admitted to New and Nonofficial Remedies; on Phenylaminoethanol sulphate, a newly synthesized ephedrine substitute; on Ovarialhormon Folliculin Menformon, the ovarian preparation originated by Dr. Laqueur of Amsterdam; and on Heparmone, a liver preparation.

The special report dealing with dextrose solutions containing cresol and intended for intravenous administration is a noteworthy example of the third category of Council reports we have mentioned.

New and Nonofficial Remedies, 1929, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1929. Cloth. Price, postpaid, $1.50. Pp. 488; xlviii. Chicago: American Medical Association.

This book offers a solution to the problem of the busy physician who is daily importuned by "detail" men to try the thousand and one new preparations brought out by enterprising manufacturers of pharmaceuticals. If the preparation in question is not described in New and Nonofficial Remedies, it is quite safe to refuse to try it no matter how alluring the salesman's talk. The book contains descriptions of those new preparations which, after painstaking examination, the Council on Pharmacy and Chemistry has found worthy of recognition and of trial by the medical profession. It is revised each year to bring it up to date with the best medical thought and to include the new preparations that have been recognized during the year as well as to delete those which have been found not to live up to their promise of therapeutic value.

In this edition there appears for the first time an article on liver preparations and their therapeutic use. The articles on ergot, metallic peroxides, pituitary gland, and radium and radium salts have been considerably revised. Among the new preparations which have been included in this edition are: diphtheria toxoid, which is the toxin of diphtheria so modified by treatment with formaldehyde as greatly to reduce its toxicity yet preserving its antitoxic power; metrazol, another proposed substitute for camphor; liver extract No. 343 and concentrated liver extract—Armour, for the treatment of pernicious anemia. Other newly accepted articles are: bismuth sodium tartrate-Searle, another water soluble bismuth tartrate preparation; scarlet fever toxin-P. D. & Co., another scarlet fever toxin manufactured under lease of the Scarlet Fever Commission; parathyroid hormone-Squibb, standardized by the method of J. B. Collip, and paroidin, made and standardized by the method of A. M. Hanson, both being solutions of the active principle or principles of parathyroid gland for appropriate clinical use. An important deletion is the omission of all generators charged with radium.

A new departure in this edition is a list of "exempted" articles. This comprises some hundred and thirty medicinal and non-medicinal products examined by the Council and found to be of such composition and to be so marketed as not to require acceptance or rejection by the Council under its rules.

A section of the book (brought up to date each year) gives references to proprietary articles not included in New and Nonofficial Remedies. This list, in conjunction with the book proper constitutes a cumulative index of proprietary medicines, which physicians may consult when a proprietary product is brought to their attention. Physicians cannot dispense with the use of the newer remedies that are brought out each year; yet they can neither judge them on the basis of the manufacturers' claims nor have they the time or means to determine their merits for themselves. For this reason, every physician should possess a copy of this volume, which annually puts at his disposal an authoritative, up to date, and unbiased estimate of these preparations.

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These symptoms, observed by Hoobler in his recent studies of Vitamin B deficiency in infants, are

1. Anorexia
2. Loss of weight
3. Spasticity of arms and legs
4. Rigidity of neck
5. Restlessness and fretfulness

Hoobler cites that the usual dietary of an infant in this country up to its third month is human milk or cow's milk, with the addition of sugar, possibly a milled cereal, orange juice and cod-liver oil.

On analysis, Vitamins A, C and D are found to be present in this diet. But only minimal and, in many cases, subminimal amounts of Vitamin B are to be found.

With the addition of Vitamin B to the diet Hoobler noted that after two weeks the infant had changed from a thin, pale, spastic, restless, whining child, refusing part of its food, to a happy, rosy cheeked, smiling baby whose appetite seemed never to be completely satisfied and whose gain in weight was remarkable.

He concludes, therefore, that "every infant should have an addition of Vitamin B to its diet and should not depend on milk, either human or cow's, as its only source of this vitamin."

The question naturally arises then, what shall be the source of supply of Vitamin B for the infant?

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Macy, Hoobler, Harris and others have published data which indicate that a very considerable number of people are subsisting on diets which are far from optimum with respect to Vitamin B.

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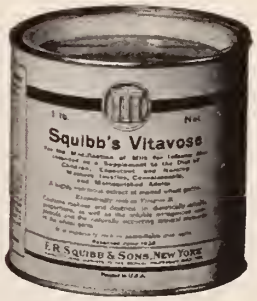

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A Day With the Secretary of the State Medical Society

(Continued from page 337)

the calendars for tomorrow to see whether any measure in which we are interested will be up for discussion. Senator Morris of Milwaukee meets us in the corridor and asks about our appropriation bill. We explain it briefly and he asks to be advised when it is due to come up on the floor. Then back to the office to sign the morning's dictation that is ready for the mails, and the eleven o'clock mail is in, but it is light today, and is of a nature that can be cared for by Miss Ripley and Miss Jurgens.

Twelve now and so to lunch with the Justice, Lieutenant Governor Huber, and Mr. Holmes of our Press Service.

One o'clock finds us back in the office where there is a memorandum on our desk to call Mr. Wilcox, chairman of the Industrial Commission. Mr. Wilcox wants a committee from the State Society to assist the Commission in determining safety standards for the storage of x-ray films and chemicals in clinics and hospitals. Can we have the names of the committee this afternoon? Will Dr. Muehlberger, state toxicologist, serve? Yes. Will Dr. White, anesthetist and Dr. Blue, roentgenologist? Yes. A long distance call to the President of the State Society. Mr. Wilcox's request is explained and committee selections are approved. The Commission is notified and a time set for the first meeting. A reporter calls hot on the trail of this news. He gets a carefully prepared statement for such a story might well make every hospital patient and his friends nervous in view of the Cleveland disaster.

A member drops in to see if Wisconsin has reciprocity with California. We find that it does and he is advised of whom to write for his application blanks.

A few more letters in the afternoon mail. A member wants us to send him material relating to the best treatment for trench mouth. The material will be in the mails tonight, says Miss van Zandt. An advertiser sends in new copy with instructions as to position. A letter from an insurance company giving us information on group liability insurance,—a subject that we are investigating with the view of lowering the cost to members. Now a breathing spell so we take the opportunity to write an editorial on malpractice that we have been thinking over ever since we heard a talk on that subject by Dr. Sullivan. The editorial goes into our pocket for we will want to read it over a few times during the next few days, to make certain that we have said exactly what we had in mind. There is nothing like laying a manuscript aside and reading it when you are fresh to see errors of omission and commission. And how many we do seem to make!

The rest of the dictation comes in, is signed, and two unanswered letters in the late mail put on top of my desk for tomorrow morning. Now a call on two local members to ascertain the full effect of a bill we noticed this morning. They agree that it should be amended. Back to the office to write the Committee on Public Policy on this.

After supper we go to the legislature to see the Assembly kill a bill to let down the bars with reference to privileged communications to physicians. Killing is what we wanted and we beam all over when the Assembly action is announced. So ends this particular day.

P. S. Like the dermatologist, generally we do not work at night.

ELEVENTH DISTRICT MEETING

Members of the Eleventh Councilor District will hold their annual meeting at Solon Springs on Monday, August 12th. The morning sessions are to be in the new village hall, while the afternoon sessions and evening entertainment are to be at the home of George Crownhart, secretary of the State Society.

The Wisconsin Medical Journal

Volume XXVIII MADISON, WIS., AUGUST, 1929 No. 8

Superficial Fungus Dermatitis of the Glabrous Skin; General Aspects of Clinical and Laboratory Findings in 1024 Cases with Therapeutic Notes*

By CLEVELAND WHITE, M. D.
Chicago, Ill.

The increasing importance of superficial cutaneous invading fungi, as the etiological agents in the production of dermatoses (so-called "ringworm") of the more expansive surfaces of the skin as well as the intertriginous areas is believed to be of sufficient reason to review the salient clinical manifestations and the chief laboratory findings of a large series of cases as well as a brief evaluation of the important therapeutic agents. Much of the recent work of many investigators has not yet found its way into the text books; most of this work is narrowing the clinical diagnosis of "eczema" to a very much smaller number of patients than a few years ago.

TERMINOLOGY

Weidman (1) has recently discussed the various terms used in connection with superficial fungus infections of the skin. The term "ringworm" has gradually been extended to include all such infections including those of the glabrous skin, scalp hair, beard, and nails. The term has been well established through usage, but it has long outgrown the original ring-shaped fungus infections of the body, so-called "tinea circinata" or "tinea corporis". The terms epidermophytosis, epidermomycosis, and dermatophytosis all have their adherents but the simple term, mycotic dermatitis, when meaning these superficial fungus infections would seem to be self sufficient; terminology is, however, unimportant if the meaning of the general grouping is understood. Each one of these terms individually includes the cases to be discussed i.e. all those superficial fungus infections of the glabrous parts of skin, particularly in the intertriginous regions or those with intertriginous affinities (see Weidman (1)). This limitation at once rules out the other regional "ringworms" as the scalp, beard, hair and nail infections as well as the deep invading fungus diseases as blastomycosis, actinomycosis, and sporotrichosis. These superficial infections do invade the bearded region of the face and the scalp, but rarely penetrate the hair follicles. Ringworm infections of the nails are fairly common, occurring both as a primary infection and secondary to fungus infections of the adjacent toes or fingers.

While tinea circinata is a very close relative of these interdigital infections, the term usually includes the more inflammatory and deep seated infections of the body causing the real ring-shaped annual lesions well known to all; these infections are usually of animal origin.

REGIONS INVOLVED

Any or all intertriginous areas may be involved, the most common being between the toes, lateral borders of the fingers, inguinocrural regions, the axillae and inframammary areas; after these, no particular predilection is noted. The severity of the subjective symptoms and the appearance of the objective signs may vary greatly according to susceptibility of cutaneous soil invaded and other predisposing factors. Itching occurs in the majority of cases, often being very severe. Pruritus ani which is often accompanied by almost intolerable itching can be caused by fungi. Many of these local superficial mycotic processes are characterized by

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* Read before the Rock County Medical Society, Beloit, Wisconsin, April 23, 1929.

* From the Department of Dermatology and Syphilology, Northwestern University Medical School.

* Studies in Superficial Mycotic Dermatitis: Clinical, Laboratory, Experimental and Therapeutic, VII.

periods of activity and subsidence. Whitfield in 1908 described cases of vesicular and scaling eruptions on the feet and hands, and urged the necessity of microscopic examination before ascribing similar cases to "gouty" or any forms of constitutional eczema. One interesting case in my series was a woman of 46 who had palmar lesions which had been considered and treated as an eczema associated with a decreased basal metabolism until fungi were recovered; relief was then soon obtained. In 1910 Sabouraud published a contribution and stated these cases were due to an Epidermophyton fungus; we now know that in this country at least only a small percentage are due to this particular organism.

CLINICAL FEATURES AND COMPLICATIONS

On cursory examination, there may be nothing to distinguish a superficial fungus dermatitis from a mild dermatitis venenata or localized eczema. Whitfield (2) believes he can clinically diagnose these fungus cases in a very large proportion, possibly 95%. The resemblance to eczema is well known to all; if vesicles are present as they often are between the toes, on the plantar and palmar areas or on lateral borders of the finger, the clinical diagnosis is quite evident. The vesicles are typically intracutaneous and are small, deep, thick-walled and often very closely grouped compared with the superficial, elevated, thin-walled vesicles of an artificial dermatitis due to an external irritant. Such vesicles appeared in lesions in this series of cases in the above designated areas at some stage of the development of the infection but rarely occurred in other intertriginous areas or on more expansive areas of the skin, so failure to find these vesicles elsewhere does not mitigate against the diagnosis of this type of "ringworm". A superimposed dermatitis venenata or secondary pyogenic infection can easily obscure the original primary mycotic infection.

Whitfield's original description of the three types of lesions usually observed between the toes, viz: (1) acute vesicular and bullous, (2) chronic vesiculo-pustular and (3) the chronic latent as sodden areas are quite well known to all clinicians; this classification emphasizes only variations of the different stages of the same fungus activity with the added influence of warmth, moisture, and excessive perspiration peculiar to these parts. The real importance lies in the recognition of these areas of interdigital mycotic infections as foci from which (1) extension can spread to contiguous cutaneous surfaces or (2) production of more generalized toxico-mycotic or possible actual fungus cutaneous manifestations occurring through lymphatic dissemination, or (3) or serving portals of entry for secondary pyogenic infection. The lesions in the groin, axillae, perianal and inframammary areas are marginated and erythemato-scaling, occasionally exuding but rarely vesicular. On the more expansive areas, the sharp margin is quite characteristic and, as Weidman states, it has some of the qualities of eczema without quite fulfilling the requirements. It is needless to add that ring-shaped lesions are hardly ever found in this type of ringworm.

In this series the fore mentioned characteristics have in the main been true but in the yeast and "thrush" infections of the non-intertriginous areas of the glabrous skin my findings are quite in accord with Whitfield's points of distinction. He points out that the edges are less definite and the interior of the areas are usually more heavily affected in cases due to yeast-like organisms. Furthermore I have observed in some of the chronic yeast-infected areas a violaceous sheen is often present. However, it is usually quite impossible to say what the causative organism will prove to be as the clinical characteristics of the areas, due to the different fungi, are very similar and often identical in appearance. The laboratory aids usually help considerably these border line cases and should always be employed. In a straight superficial fungus dermatitis there can hardly now be much confusion with "eczema". Treatment of non-fungus cases with fungicidal remedies can easily produce a very stubborn dermatitis venenata.

To what extent toxicity occurs and causes widespread eruptions, full knowledge is still not obtainable. In one case investigated the same fungus was found microscopically and culturally from lesions between the toes and

the inguinal lymph nodes (3). Four other cases, two of grouped follicular papules, one of vesiculo-papular and one of papular were observed associated with either active toe or hand foci; scrapings from the exanthem and blood examinations were negative for fungi so these eruptions were considered of mycotoxic origin. In addition to these, two undoubted cases of generalized exfoliative dermatitis followed and were associated with very active ringworm infections of the hands. Charles J. White (4) found 3.1 per cent of his series of 1013 cases to have more or less mild toxic sequelae such as fine macular scaling. He found at least eight different types of lesions in the primary foci, viz: vesicular, scaling, macular, macerated, fissured, papular and callous, and keratosic, being most common in the order named. Because of the above mentioned and other possible widespread manifestations, it certainly is a most protean disease.

LABORATORY AIDS

The various clinical manifestations enumerated viz: (1) intertriginous or associated with intertriginous foci (2) sharply marginated and (3) eczema-like appearance warrant the diagnosis of ringworm; the final confirming factor is the positive findings of the laboratory. Scrapings collected from the active border or the roofs of vesicles give the highest percentage of fungi under the microscope. On these materials placed on a glass slide one or two small drops of 10 per cent sodium or potassium hydroxide are added; this is usually termed the KOH preparation or the alkali technique. Further details are unnecessary except it is best to allow the KOH preparation to stand in a moist chamber for 24 to 72 hours and frequently examined. The thread-like refractive hyphae and budding yeast cells are best observed after standing for several days. Most of the text books give the erroneous impression that 10 or 15 minutes' standing will digest the cutaneous material so that fungi can be observed; if only this amount of time is allotted for digestion, many positive fungous cases will be missed. As cultures (Sabouraud's glucose media) are only occasionally positive when the extemporaneous alkali examination is negative, they are more of academic and scientific interest than of diagnostic importance at the present time. Increased knowledge of the causative pathogenic flora will no doubt in time be of great clinical benefit and therapeutic value. Endeavors to find a suitable stain for these fungi have met with only limited success. In a few typical cases clinically no fungi can be found even on repeated trials, so the diagnosis may have to be founded upon clinical grounds.

CAUSATIVE ORGANISMS

Examination of the positive alkali preparations have revealed in this study (1) refractile thread-like hyphae in 717, (2) yeast, including positive cultures, 204, (3) mosaic in 84, (4) yeast-like cells and hyphae—the "thrush group"—19. A few cases (16) not included in this list were clinically quite compatible with mycotic dermatitis but repeated KOH examinations were negative; various strains of staphylococcus grew in cultures.

Hyphae in the extemporaneous preparations are usually accepted as being the causative organisms; these cases are often classed as the hyphomycetes. Some are thick and others are thin; some are branching and others are segmented. From the KOH preparation in this type of cases it could not be foretold with certainty what hyphomycete would grow in culture. Weidman, the acknowledged cutaneous fungus authority of America, agrees with this opinion. Approximately 12% or 84 of this group (positive hyphae on KOH study) grew cultures of which only four were Epidermophyton Inguinale and nine, in the Trichophyton Gypseum group, while the rest (71) were considered Trichophyton Interdigitale. The term "mosaic" is applied to hyphae which follow the intercellular clefts, surrounding the various sized polyhedral spaces and giving the "pavement" effect. There has been some dispute as to the pathogenicity of this type of fungus or as to whether it is really a fungus at all; Weidman (5) however considers them pathogenic. In the series of these cases such findings in clinically typical mycotic vesicles convince me that they are fungi and are pathogenic. Occasionally a positive yeast cul-

ture is found from "mosaic" positive scrapings. I believe the mosaic fungus to be an active mutation form rather than a degenerate state of a hyphomycete as some state.

Yeast fungi, especially those of cryptococcic morphology, have been found to be pathogenic by experimental auto-inoculation (6) human tests. Authoritative clinical and laboratory reports (4&7) plus the positive inoculation tests have proven the yeast fungus etiology of many cases of dermatitis of seborrheic distribution.

The various fungi which cause the clinical condition known as thrush are usually Monilia; they are now known to cause superficial dermatoses. Thrush of the mouth has been known for years to be due to fungi. The 19 cases found in this series are being reported elsewhere in detail (8).

The role of bacteria in causing eruptions simulating those due to superficial invading fungi is still unsettled but the positive findings of a new bacterium by Castellani (9) in certain granulomas and the inability to find fungi in cases cited by J. H. Mitchell (10) strongly suggest this possibility. S. L. Vaughan's (11) finding of a new bacterium as being dermato-pathogenic is highly noteworthy. Negative findings of fungi in typical mycotic areas removed from fungus foci can be explained in some cases by a change of hyphae morphology; this was recently proved on experimental human volunteers in the Dermatology Department of Northwestern University Medical School (12).

Considerable discretion has to be exercised in judging the pathogenicity of fungi recovered from the human skin; animal experimentation is of limited value but strict adherence to Koch's postulates, using human volunteers, is the only real test of pathogenicity.

CONTRIBUTING FACTORS

There are several extraneous factors and organic phases which aggravate or prolong mycotic infections in certain people. Any irritant, especially those incidental to industrial pursuits, which have recently been appraised by the writer in a paper (13) read before the Chicago Medical Society, must be kept in mind; different patients are susceptible to different irritants. Gently washing with water and soap often helps a superficial fungus infection.

In a number of patients obstinate to therapy, it was found that the peripheral arterial circulation was impaired (14), and measures were taken to increase the blood supply; rest and sodium citrate injections proved helpful. Local therapy was, of course, also used. The histamine test as used by deTakats (15) is useful in detecting this impairment. Venous engorgement provides an excellent background for fungi to grow. Hyperglycemia must be kept in mind especially in the multiple intertriginous yeast dermatoses for any excess of glucose furnish an excellent human culture medium. Usher's (16) recent work is to be remembered in this connection; he believes that it is possible that in some persons with disturbed carbohydrate metabolism pathogenic organisms normally present on the skin surface become activated and exert effects.

These "ringworm" infections must often be investigated from every angle for it is only too common to find patients who are disabled for weeks and even months. Fungi can secondarily invade other wounds and a recent clinical report by McNealy and Lichtenstein (17) is of interest in regard to this possibility as a complication in traumatic surgery.

FREQUENCY AND MEANS OF SPREAD

A recent report of U.S.P.H.S. (18) in its health news remarks generally on the frequency of this type of ringworm infection especially of the hands and feet, which is especially prevalent during the hot weather. In my series however, I found a few people whose condition is actually aggravated during the cold weather. Various reports show that 50 to 60 percent of all adults have the disease in some form, often being very trivial and not even noticed. It is easily spread by runways in club houses, and wet floors around swimming pools and using infected clothes, especially of others. Heat and moisture naturally promote fungus life. The infectious possibilities should be explained to the patient.

THERAPEUTIC NOTES

Scientific therapy is naturally trailing etiological investigation and now is the period for more research for the direct benefit of the patient. The importance of thymol as a fungicide has recently been emphasized by Myers and Thienes (19); various fungicidal preparations usually give rather prompt help. It is hoped that research work now being pursued in the Dermatology Department of Northwestern University Medical School will give us more definite aid in better treating our patients. At the present time we cannot fit any specific preparation to any particular type of causative fungi.

After supervising the therapy in a large number of the cases in this series and observing the results of treatment in the rest, I, with this limited experience, quite agree with Whitfield that the benzoic compound ointment (which was originated by him) is probably the best treatment for the fungous infections especially in the subacute and scaling more or less chronic types. Whitfield's original prescription contains approximately 5% benzoic acid and 3% salicylic acid—he uses a base consisting of olei cocois mucis; in this country usually a petrolatum base is used. The proportion of active drugs have to be increased or decreased according to the parts of the body involved and the thickness of the involved horny layers. Charles J. White's 6% crude coal tar ointment is very useful in many; Myers' thymol preparation (oil of cinnamon 2, thymol 5, alcohol q.s.ad 200) is quite satisfactory in some of the most stubborn cases. As yet we have no specific drugs as the vast number of preparations used would testify. Iodine, ammoniated mercury, formaldehyde, mercurochrome are successfully used by some. The acute cases, of course, have to be treated locally similar to an acute eczema or dermatitis venenata i. e. with soothing preparations. Any contributing constitutional defects should be remedied as much as possible.

The x-ray in fractional doses helps many cases, at least, temporarily; the ultraviolet lamp is an aid in a few. The experience I have gained is to see the patient often enough to change the preparations as necessary. Proprietary ointments are only mentioned to be rejected; the patient is at least entitled to an honest effort to try to treat him individually. To prevent infection of others, affected people should never walk in their bare feet on the floor and avoid close contact with others where hands, etc., are involved.

I do not share the pessimistic viewpoint of some in regard to the treatment of these superficial fungus infections; local treatment is usually quite efficacious, although relapse is somewhat common and re-infection always possible. One must be careful not to use preparations which are too strong.

SUMMARY

The chief clinical manifestations, common locations and laboratory findings of 1024 cases of superficial fungus dermatitis or "ringworm" are reviewed. The interdigital lesions assume various aspects but importance is laid on the fact that these can act as foci for widespread dermatoses both by direct extension and by toxic dissemination. These fungi do enter the lymphatics; no statistics are available to what extent this occurs.

The causative fungi are grouped as 1) hyphae 2) mosaic 3) yeast and 4) thrush types. Bacteria undoubtedly produce superficial dermatoses but their role is still undetermined. Of the positive cultures in the hyphomycetic group, the Trichophyton Interdigitale fungus decidedly predominated. The most useful laboratory aid is the alkali preparation.

The important therapeutic aids are briefly evaluated and chief contributing factors to "ringworm" are reviewed.

(Many of these patients were seen in association with Dr. E. D. Osborne and Dr. A. W. Stillians; the rest in the Dermatology Department of Northwestern University and in office practice.)

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Lead Poisoning, the Diagnosis and Treatment of Its Most Common Toxic Episode, Lead Colic*

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Acute abdominal pain is probably the most serious complaint that a physician has to evaluate. The study of the symptoms comprising the picture of the so-called acute abdomen, too, demands more intelligence than the mere giving of morphin or immediate operative exploration. Yet to withhold relief seems refined cruelty requiring a peculiar kind of courageous calm on the part of the physician who knows he should not relie' pain until he is sure of the underlying cause.

There is no instance when this is more true than in the colic of lead poisoning. The likelihood, moreover, of meeting this complaint frequently is well worth considering when one realizes that the modern industrial worker is exposed to the insidious destructiveness of lead in one hundred and fifty or more varied industries (4). It was during my work in the Henry Ford Hospital of Detroit that I really began to sense the clinical importance of lead poisoning, both in the necessity of prompt relief of its acute phase and of the cautious treatment of its chronic stage.

Every physician is familiar with the cardinal signs and symptoms of lead poisoning so I shall merely recapitulate them later. Now I wish to discuss the principles underlying the therapy of lead poisoning. For these we are indebted to the carefully recorded observations of many physicians for hundreds of years as well as to recent research, and can therefore penetrate well beyond mere clinical phenomena or empirical treatment. The most thorough and recent work on this subject has been done by Joseph C. Aub and his associates, published in their monograph on lead poisoning in 1925, (1). With their theoretical grasp of the problem and its practical application they have reached a peak of medical achievement; that is, to give speedy relief for the violent abdominal pain of lead colic without morphin.

* From work done in Dept. of Med., Henry Ford Hospital, Detroit, Mich.

[1] Presented before the Milwaukee Academy of Medicine, Oct. 23, 1928.

The following is their theory substantiated by experiments on man and animal. Lead intake, chiefly through respiratory channels or mouth ingestion, results often in some actual absorption into the blood stream, especially in the case of inhalation. What little is thus actually absorbed into the general circulation bathes the entire organism as an insoluble phosphate in colloidal state. While so circulating it exerts most of its toxic effect on the blood, liver, gastro-intestinal tract, muscles, kidneys, and central nervous system; but as it passes through the skeletal system, under certain metabolic conditions the lead may be removed from the blood stream and be fixed as a very insoluble lead compound, the tertiary lead phosphate. This is stable unless the hydrogen iron concentration is altered or the calcium balance is disturbed. Once so fixed the lead becomes apparently harmless unless some effort, well planned or otherwise, is made to release it. Aub has shown that a positive calcium balance favors this "leading of the bones", whereas a low calcium intake favors "mobilization of lead" with its resultant excretion.

This deleading process initiated by a low calcium diet may be hastened by causing a shift towards the acid side of the physiological pH by giving acids or their salts like phosphoric acid or especially ammonium chloride, ten grams a day tripling the lead excretion. It may also be accelerated without a low calcium diet if the shift towards the alkaline side is made by giving sodium bicarbonate, 30–40 grams a day doubling the lead excretion. Finally, without any special diet or effort to alter the pH, potassium iodide grains five t.i.d. increased to tolerance, used empirically for hundreds of years, facilitates the lead mobilization and also doubles its excretion.

LEAD COLIC

"Lead colic", the most dramatic symptom after actual lead absorption has occurred, is what usually brings the worker to the doctor. For several weeks or months he may have had constipation more severely than usual, or even diarrhea, indefinite weakness, vague headache, anorexia, sweet or metallic taste, but has been content to use home remedies for these apparently minor complaints. He clamors for immediate relief however when he is suddenly seized with a spasmodic, tearing abdominal pain causing him to writhe in agony and leaving him pale and quivering, drenched with a cold sweat of exhaustion.

When confronted with this spectacle the doctor may first think of renal colic and often feels justified in giving palliative relief with morphin, especially if he should find blood in the urine. If the patient is also jaundiced the physician naturally thinks of biliary tract obstruction. The possibility may occur to him even of perforated peptic ulcer, acute pancreatitis, or coronary occlusion. When the symptoms are not quite so terrific but are associated with vomiting and localized pain below the umbilicus he may think of appendicitis and operate. Of course with almost complete obstipation he may feel he is dealing with intestinal obstruction, as indeed he is, of a certain sort. An apparently unimportant complaint like that of shooting pain in the extremities, may, in some cases, actually decided the diagnosis as that of lead poisoning.

Careful search for certain "signs", if he has thought of lead poisoning, will aid the examiner. When he does not find the traditional "lead line" in the gum margins he will do well to look still further, for many observers report cases of lead poisoning without this finding. He also may be struck by marked pallor of an ashen grey type which is out of proportion to the amount of anemia present. If he should take the trouble then to look for weakness of the hand extensors or even for a difference in the strength on both sides with weakness perhaps most marked in the hand most used, he would surely find corroborative evidence that he might be dealing not only with a case of lead ingestion but of actual absorption and toxicity. The absence of tachycardia and abdominal spasm should finally help him to rule out the "acute abdomen".

Resort to laboratory findings will aid still more in some, but not in all cases. Another traditional finding may here be lacking but should not discourage him. Many cases of undoubted lead poisoning do not reveal the well known basophilia or stippling of the red

cells. Usually, though, one does find this present as one of the most reliable of the early signs of lead intoxication. One must naturally rule out the small normal percentage of basophilic cells or that found in primary anemia, leukemias, or cachetic states associate with neoplasms. Leukocytosis may or may not be found but if so is usually a relative lymphocytosis. Increased resistance of red blood cells to hypotonic saline with at the same time increased fragility to trauma of circulation is noted by Aub. The discrepancy between marked changes in the morphology of the red blood cells and the moderate amount of secondary anemia is the most important of all blood findings (7).

Qualitative and quanitative examination of the urine though very tedious and requiring considerable laboratory equipment is of most definitive value. The new precipitation method of Fairhall is less burdensome than the old evaporation method. The accuracy of the titration method used by Aub and Fairhall refutes the claim of Kehoe, etal. that examination for lead in urine is valueless as they found it in urines from patients never exposed to lead using however a relatively inaccurate colorimetric method (5). Absence of lead in the excreta does not eliminate the possibility of exposure. Lead in the stool may be present in quantities but is of no importance usually, as it may mean mere ingestion and excretion without actual absorption into the circulation. Lead in the urine, however, is usually present only after its actual absorption into the circulation.

Hematoporphyrinuria, while given much signifiance in the German literature, has not been used much in this country as a diagnostic criterion, because it may be present in other coincident diseases such as rheumatism or even "chronic passive congestion" from whatever cause.

The best physicians may sometimes think last of asking for the patient's present occupation or even for the occupation before the last. Here of course may be the key to the whole situation. It is not enough simply to find out if a man has worked in a tire factory or storage battery works, but he must be interrogated closely as to the exact type of work and precautionary measures observed. To do this intelligently the physician will find his time well spent if he goes through such a plant looking to see, for example, whether the lead solder is boiling without hood or the powdered litharge is being carelessly dusted into the rubber mixing rolls or spilled profusely over the floor as well as the mixing tables even out in the main shop of the storage battery factory, affording the ideal condition for inhalation and resulting toxic absorption of lead (2).

MEASURES FOR PROMPT RELIEF

As soon as one suspects that he is dealing with some aspect of lead poisoning such as lead colic he wishes to give prompt relief even before all his laboratory reports are available. Without any special measures the colic might subside within a week or ten days without danger to life if the individual is simply removed from his exposed occupation. In this week however the patient would probably seek help from another doctor. Commonly one resorts to the old reliable method of catharsis induced by daily doses of epsom salts supplemented with frequent enemata. By local application of heat or by the administration of atropin or nitroglycerin, intestinal spasm may be partially relieved in four to five days. But the period before relief can be reduced further to two or three days if one follows the newer work of Aub with the idea of precipitating the lead in the skeletal system by increased calcium ingestion.

Calcium intake should thus be increased by a diet containing at least one quart of milk a day, cottage cheese, eggs, fresh vegetables and fruits, as well as two grams a day by mouth of calcium lactate. The positive calcium balance thus obtained should stimulate the leading process of the bones. And for more speedy relief Aub suggests in a notation of five cases the injection of calcium salts intravenously.

After the acute symptoms have subsided the actual deleading process may be initiated by giving sodium bicarbonate, potassium iodide, a low calcium diet, or by developing a mild acidosis with ammonium chloride. In a more recent work than the monograph previously mentioned, D. Hunter and Aub (3) have noted that the excretion of calcium and

consequently of lead can be facilitated most markedly by the administration of the parathyroid hormone. They note however that where a large lead excretion occurred with the first parathyroid administration, repetition of this treatment produced very little effect. The remainder is excreted gradually in usual routine of metabolism. Hypercalcemia is to be guarded against, moreover, as it may even cause severe collapse. Lead may persist in excreta for years, being eliminated in small amounts from day to day so it is impossible to state when a patient is totally deleaded.

I can most clearly emphasize these principles of diagnosis and treatment by illustrating with actual case records. I wish therefore to present the following analysis of seven cases of lead colic the care of which I have supervised.

As treatment is the most important aspect of this paper the cases will be discussed in the order of complexity of treatment, the simplest and most conservative given first. These cases were treated in a large private hospital where the volume and variety of cases did not permit of very long hospitalization, and where naturally the "human experimental animals" concerned wished results as soon as possible.

CASE REPORTS

The patients were all white males aged from 26 to 39. Three were occupied as battery makers, two as lead foundry workers, and two as auto body finishers. The duration of exposure was from two to thirteen months in six of the cases and three years in one case. The duration of all symptoms varied from one to six months in six of the cases, and in one only one week.

The symptoms most frequently met were those of abdominal cramps in all seven; constipation in six; tiredness or weakness in four; vomiting in four; headache in three. One rather unusual symptom was that of cramps associated with diarrhea following several weeks of constipation and another that of persistent shooting pain in the left arm in the case of longest exposure and which showed signs of lead encephalopathy.

The signs most frequently noted were "lead-line" in six cases, but the traditional "signs" were most at variance in the 7th case, there being no lead line though there was positive Pb in the urine. He also had a positive Romberg and diplopia on looking up and down, signs of C.N.S. involvment of some kind, but unfortunately was not studied closely from laboratory viewpoint as he left after two days' stay in the hospital. Jaundice was present in three cases. Unusual pallor was noted in only one case as was arteriosclerosis but this was in the oldest of the series. Blood pressure was normal in six cases substantiating somewhat a modern theory that the cardiovascular system is not really much affected by this toxic agent. No abdominal spasm was noted in any of the cases though the abdomen was tender in two cases. I observed signs of approaching lead palsy in one case only, with weakness of both forearms. It was interesting that though fever was noted in six of the cases it never was above 100 (4) and was subnormal in the same cases at times, associated with bradycardia in five cases.

The laboratory findings showed stippling in six of the cases; lead in urine, in five of the series; normal differential and leukocyte range in all; and mild but definite anemia with color index of one or less in all.

The most conservative and slowest type of treatment, that of a simple bland diet and mild catharsis, brought about by use of mineral oil was efficacious in one case (G.K.) a male of 31 years who had had abdominal cramps with vomiting for five weeks. He was discharged in eleven days on potassium iodide and when seen one week later was still improving. In addition to catharsis the next case (F.M.) gained relief in two weeks by high calcium diet and calcium lactate by mouth. He, a male of 33, had had weakness two months, abdominal cramps six weeks finally requiring morphine. This case illustrated the danger of deleading a patient too soon for when he was put on a low calcium diet with ammonium chloride for the next two weeks, his pain recurred. He was therefore put on a high calcium diet and calcium lactate for about a week and was discharged on the same regime. When seen in the out-patient department two weeks later he was without symptoms.

That this slow but sure relief can now be replaced by more expeditious treatment, also suggested by Aub, is well shown by the next case (H.M.) a male of 29 years where the patient gained relief within half an hour after administration of 50 cc of 2% calcium chloride intravenously. He was then put on a diet of high calcium and calcium lactate for five days. Previous to admission he had lost forty pounds as he was afraid to eat because of abdominal pain. Here is also the second case to illustrate the danger of deleading prematurely, for when he was put on a low calcium diet and ammonium chloride for four days and discharged on full diet and KI further to delead, he returned with recurrence of symptoms. He was again rapidly relieved in fifteen minutes by one intravenous injection of 50 cc 2% calcium chloride. After a week of high calcium diet and calcium lactate by mouth he was instructed this time to continue on the high calcium intake to avoid releasing the lead back into the blood stream with the resultant return of his distress.

Another example of quick relief of symptoms with intravenous therapy was that of (G.S.) a male of

36 with cramps and diarrhea, who received a daily intravenous injection for three days of 50 cc 2% calcium chloride after he had had a day's trial of catharisis and enemata. Three days later he was discharged on a regular diet and potassium iodide to delead him as Aub recommends. In accordance with my own experience thus far in attempting to delead patients, he should have developed recurrence of lead colic but was free of such symptoms though he had developed iodism due to taking potassium iodide every thirty minutes by his own mistake.

Patients were sometimes given more than one intravenous injection of calcium chloride to be sure that most of the lead had been stored in the bones rather than because their acute symptoms had immediately recurred. The relief obtained was usually within fifteen minutes to half an hour if it was to be obtained by one injection.

Another example of safe deleading, as well as rapid relief of acute symptoms, was shown by J. N. a male of 34 years with weakness six months, cramps and vomiting one day before admission who after a day of catharsis and enemata received a daily intravenous injection for three days of 50 cc 2% calcium chloride. He was kept one more day on high calcium diet and calcium lactate by mouth and discharged on a low calcium diet and ammonium chloride to delead him. Contrary to my somewhat pessimistic expectations as to deleading, he returned in two weeks without recurrence of lead colic. To continue the deleading process he was then put on potassium iodide still without apparent resulting distress since he did not report for further treatment.

Probably the most satisfactory regime of treatment in this series is shown in the last case (S. B.) a male of 39 with constipation and cramps for one week and severe abdominal pain on admission who was put at once on high calcium liquid diet and calcium lactate as well as daily epsom salts and high enemata. On the second day he was given the first of four daily calcium chloride intravenous injections, 50 cc 2% with speedy relief. Three days later he was discharged on a high calcium diet no effort having been made to delead him either in or out of the hospital. He persisted in this treatment at home for a month and when then seen had lost both the stippling and lead line. That deleading will probably take care of itself most safely is also shown by this case, who, when seen three months later, had spontaneously reverted to his ordinary diet with no evidence of return of plumbism.

PRINCIPLES OF PREVENTION

Even though this new method of treatment makes it possible to return the worker to industry sooner than formerly, I am still interested in studying the proved preventive measures that may be applied to keep the worker continually at his occupation. To do away with lead itself is as thoughtless and unnecessary a proposal as to do away with the automobile because of traffic accidents. Principles of prevention are: 1. Selection of employes, eliminating the over-susceptible like women, adolescents and negroes. 2. Frank concentration of risks where all workers involved appreciate their danger and take full advantage of all safety measures, especially those directed against lead inhalation like respirators or avoidance of dust by wet processes. 3. Adequate control of the few exposed workers by frequent physical and blood examination. New value has been recently added to this latter method of examination by the work of C. P. McCord, who, in April 1928, published his simple but accurate "chamber" method of counting basophilic red blood cells (6).

CONCLUSIONS

The conclusions reached in this study of lead poisoning are first, diagnosis is not to be made by resort to any one of the traditional diagnostic points but only by the exhaustive process of correlating many findings, requiring the same broad judgment that is essential in marshalling the diagnostic data in a suspected tuberculous case.

Second, the treatment of the acute stage by increasing calcium intake by mouth as outlined by Aub is both logical and practical.

Third, that intravenous injection of calcium chloride, also suggested by Aub, rivals morphin in the speedy relief of lead colic, and is certainly much safer in the diagnostic period of the case.

Fourth, that in the handling of the chronic stage in adults these studies suggest that the most cautious course is here the most satisfactory; namely to discharge the patient on a high calcium diet allowing him gradually to delead himself under observation as he reverts to a normal diet in the course of months and years, rather than to precipitate a recurrence of the acute symptoms by a premature attempt to delead him.

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Roentgenologic Diagnosis of Lesions of the Lung*

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The correlation of anatomic and physiologic with roentgenologic studies has defined the factors concerned in the visualization of the normal architecture of the lung.

If one takes a normal lung and draws in the anatomic factors, a sharp demarcation into an inner and an outer segment can be outlined by a curved line (Fig. 1).

A generally accepted term in roentgenologic practice to describe certain types of opaque shadows seen in roentgenograms is "infiltration." In a medical sense, it indicates that a substance has passed into the tissues and formed an abnormal accumulation. Such abnormal accumulations in the tissues of the lung frequently change the density of the lung to the point of opaqueness to the roentgen ray. A comparison of the roentgenogram with the macroscopic and microscopic data in various pathologic conditions has established characteristics in the size, shape, acuity and distribution of these opacities, so that most lesions involving the lung can be differentiated.

By taking a series of one distinct lesion and superimposing the shadows, it will be noted that a majority coincide in situation in one of several segments of the lung. This site is definite enough so that two horizontal lines, one through the lower border of the seventh rib where it joins the vertebra and one through the lower border of the ninth rib where it joins the vertebra, will subdivide the chest into upper, middle and lower segments (Fig. 1) and the relation of different lesions to give nsegments can be established.

* Read before the Rock County Medical Society, Janesville, Wisconsin, January 29, 1929.

THE INNER SEGMENTS

The inner segments contain the trachea and the vessels and the bronchi; the entrance point of these is known as the hilum.

The superimposition of various structures often lends a false impression of the area of the hilum in the flat plate; stereoscopic visualization, by separation of the component parts, assists in the untangling of this mass and is therefore indispensable to proper interpretation.

THE UPPER INNER SEGMENTS

One frequently sees an increase of the linear markings in the first and second interspace, and along the vertebral border toward the apex, confined to the inner segment. This may extend slightly into the outer segment, but diminishes rapidly in intensity toward the periphery. In older persons it may represent chronic bronchitis, or a part of a generalized fibrosis; in young adults, the condition is commonly the sequel of an acute respiratory infection, known by the comprehensive term "bronchial scarring." In children, probably owing to the increased amount of lymphoid tissue, the shadows of the inner segment (hilum) are generally more profuse than they are in adults, and should thus be considered in interpretation.

THE MIDDLE INNER SEGMENTS

In the inner middle segments, the predominant lesions to keep in mind are abscesses due to aspiration and primary carcinomas of the bronchus. The characteristic of an abscess resulting from aspiration, such as following tonsillectomy, or exodontia, under anesthesia, is that it shows a predilection for

the upper lobes. Such abscesses are most frequently seen commencing in the upper quadrant of the inner middle and extending into the lower quadrant of the upper outer segment. Pathologically the infected material lodges in one of the smaller bronchi, acute inflammation of the wall results, with pneumonia in the adjacent lung, and later the formation of a cavity by necrosis; the roentgenogram therefore shows consolidation with an area of decreased density denoting the cavity. In carcinoma of the bronchus, the roentgenogram shows the result and not the cause. The tumor causes obstruction of the bronchus with damming back of the secretion, and the shadow is that of consolidation or encysted fluid in the lower half of the middle and upper half of the lower middle segment. Because of the limitation of the involvement to one bronchus, the shadow is nearly always rather definitely circumscribed. I have seen the overaëration of a lung in one case similar to that seen in non-opaque foreign-body obstruction.

In tuberculous glands, malignant lymphomas or other conditions in which, due to mediastinal involvement, pressure may be exerted on the mediastinal contents, the only roentgenographic evidence may be a feathery type of shadow radiating from the middle inner and extending into the surrounding segments. The only plausible explanation of this, to me, is an engorgement of the lymph and other vessels rather than a pathologic tissue infiltration, because of the similarity of the shadow in widely different mediastinal lesions.

THE LOWER INNER SEGMENTS

Bronchiectasis most frequently affects the lower inner segment, and occasionally the process extends into the lower outer segment. It may involve other branches of the bronchial tree alone: the shadow appearing in the segment represented by the involved branch. Small localized bronchiectatic areas may be seen in other sections of the lung, but in my experience they are seldom of clinical import. Similarly, bronchiectasis may exist in persons beyond middle age without manifesting clinical symptoms.

Bronchiectasis is a dilatation of the bronchi and inflammation of the walls. The result is multiple small cavities containing purulent or mucopurulent exudate. The roentgenogram may vary according to the amount of the contained secretion. When the cavities are filled, a mottled shadow of multiple small consolidations results; when they are emptied, as many of them can be by placing the patient in a sitting posture with the head bent well toward the floor, the small homogeneous shadows are less dense and shadows of multiple small cavities take their place.

THE UPPER OUTER SEGMENTS

The lesion in the outer segment is, with but few exceptions, tuberculous. Many observers of wide experience refuse to diagnose tuberculosis unless there is some evidence of it in this segment. Landis asserts that "the chronic ulcerative type, as seen in adults, always starts at the summit of the lung and never at the base" and "even in extension of the process, it is characteristic that in the lower positions, the infiltration is usually widely scattered."

Pathologically, pulmonary tuberculosis is

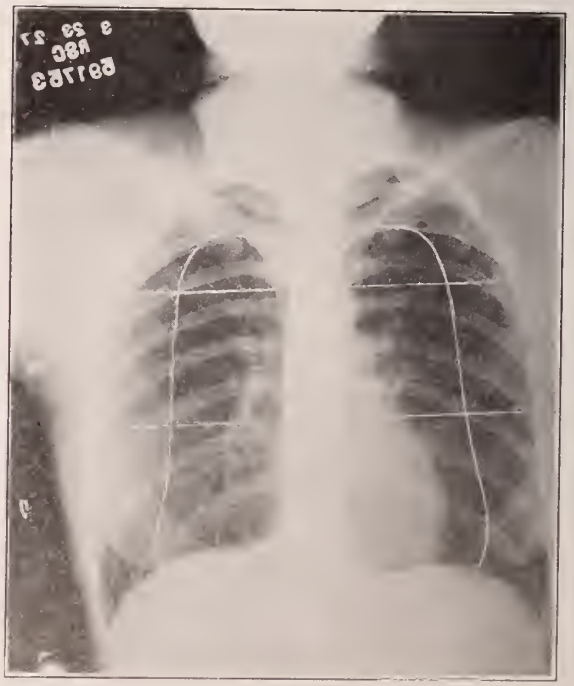

Fig. 1. The horizontal and curved lines divide the chest into six segments. Composites made of a series of lesions show a definite sectional situation of many of them.

seen in the primary and the secondary stages. The primary lesion is of little importance roentgenologically; the only evidence of it may be the occasional calcified fleck, usually in the peripheral margins, more frequently in the lower lobes, and in the corresponding gland of the hilum. The roentgenogram depicts every step in the pathologic processes of the secondary lesion. The earliest evidence is the soft, snowflake shadow in the first or second interspace and always in the peripheral segment. Secondary tuberculosis originates as an implantation in the wall of a bronchus 2.5 to 4 cm. below the apex, with congestion of the blood vessels of the mucous membrane, proliferation of the epithelial cells, pouring out of fluid and emigration of white cells. Widening of the shadow comes with an extension of the growth of the bacilli into adjacent alveoli and the formation of tubercles. The shadows are heightened in intensity by small groups of tubercles coalescing to form caseous masses, become still more pronounced with the formation of fibrous tissue, and attain their maximal density with the deposition of lime salts. When the latter two processes supervene, with experience, the stage of the disease and its activity, or nonactivity, can be judged.

The shadows in the roentgenogram are almost unlimited and vary with the gross pathologic lesions, but it should be borne in mind that, in tuberculosis, the apex of the lung is usually affected and that extension occurs largely through the bronchi. Exudative lesions (from tuberculous pneumonia), if large areas are involved, will exhibit the homogeneous density of lesions of confluent bronchopneumonia. Nodular lesions, which are proliferative in character and surrounded by a zone of exudate, arising by extension through the bronchi, produce a "fleecy cloud" effect of the greater part of the lobe, and this may vary in intensity, as the nodules become confluent to form large opaque areas.

Pleuritis, interlobar and visceral, may serve to intensify the peripheral density. Cavities may arise from the sloughing off of necrotic and caseous material, or from the extension of a nodular lesion into the bronchus. The stereoscopic demonstration of

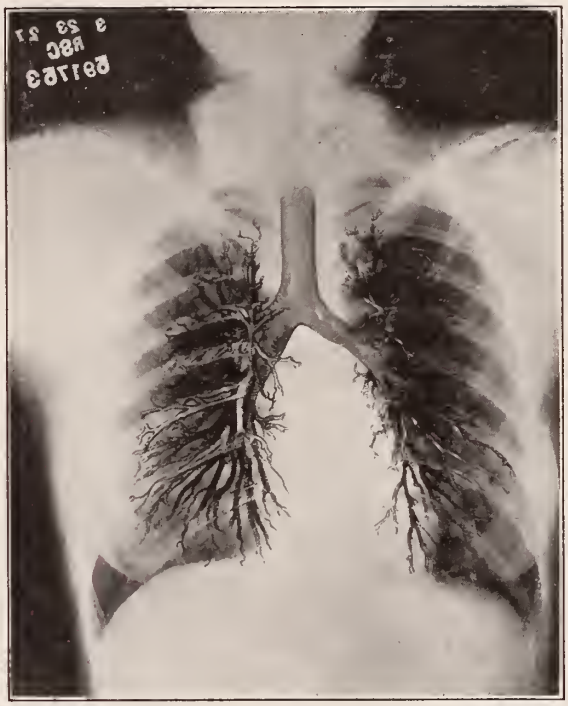

Fig. 2. Anatomic studies explain the sectional situation of many lesions. Recalling the gross pathologic picture and considering the situation of a shadow, the lesion can be diagnosed in most cases.

depth in the shadow will serve to differentiate cavities from annular shadows and retractions of the apexes and upper lobes, with or without pleuritic adhesive bands running to the periphery.

Secondary infection of cavities may serve to complicate the picture and the densities of the walls may change as they undergo partial or complete arrest by the formation of fibrous tissue. The fibrous type may cast a shadow dense enough to simulate carcinomatosis; preëxistent fibrosis or bronchial scarring from former acute or chronic infections might add to the difficulties of interpretation, but if the evidence of a coexistent focus in the upper or outer segment is insisted on for a diagnosis, the possibility of error will be materially lessened.

THE MIDDLE OUTER SEGMENTS

The commoner lesions affecting the outer middle segments are: pneumonoconiosis; nontuberculous chronic indurative pneumonia; infiltrative types of metastasis; abscess, and empyema. The early pathologic changes resulting from silicosis are not dissimilar to

those of tuberculosis, but the end result is fibrosis and lymph block. The roentgenographic shadows radiate from the hilum toward, but not completely to, the periphery. The root shadows are more dense, and the trunk shadows are increased in density and breadth, with numerous punctate deposits of varying size along them. Fairly symmetric, small, circumscribed, dense areas are seen throughout both lungs; later, masses accumulate, giving the appearance of patchy consolidations.

Tuberculosis not infrequently is superimposed on pneumonoconiosis and may serve to complicate the picture.

The nontuberculous lesions that accompany pneumonia are more common in the lower segments but not infrequently involve the middle segments. They appear in the roentgenograms as coarsely mottled shadows at the peripheral margin, shading to the complete density of a consolidation as it approaches the hilum.

The so-called infiltrative types of metastasis result from nodules so small and numerous as to resemble a confluent, lobular tuberculous lesion or extreme fibrosis. The middle and lower segments are usually involved.

The embolic type of abscess and that due to foreign bodies is more common in the lower lobe, and so involves the middle and lower outer segments. The pathologic picture is that of subacute or chronic pneumonitis; the alveoli are filled with pus, and necrosis of the alveolar septums results in cavity formation. In the roentgenogram of this type is a circumscribed homogeneous shadow representing the consolidation with a central area of decreased density denoting the cavity. With extensive destruction, a fluid level may be seen with an air space above, and alteration of the patient's position will be followed by alteration of the fluid level. The extension of the abscess through the pleura will result in empyema; the homogeneous shadow will then include the periphery of the segment and occasionally a fluid level will reveal the thickening and retraction of the visceral pleura. In the lower segments, pleurisy with effusion complicated by marked thickening of the pleura may be difficult to differentiate from empyema. In cases of fluid without suppuration or pleural thickening, the ribs are frequently visible through the homogeneous shadow; usually, aspiration is necessary to establish definitely the diagnosis. The persistence of bloody fluid in the pleural cavity is suggestive of invasion of the pleura by a malignant lesion.

THE LOWER OUTER SEGMENTS

Bronchopneumonia, lobar pneumonia, abscess, empyema, nontuberculous infections, and infiltrative metastasis are the lesions commonly involving the lower outer segments.

Bronchopneumonia is represented by a coarse mottled shadow, the characteristic feature of the disease being scattered nodules. The infection begins in the hilum and spreads to the lung and pleura by way of the lymphatics. The larger bronchioles are inflamed, and a purulent exudate is present. The walls are thickened and the adjacent lung tissue is consolidated. Atelectasis of the uninvolved lung tissue is common.

Lobar pneumonia is characterized by consolidation and the roentgenologic appearance is that of homogeneous increased density of the whole periphery; the interlobar pleural line is sharply demarcated. As resolution proceeds the shadows become mottled, the interlobar demarcation disappears and the shadows decrease in density until they are almost completely lost.

LESIONS INVOLVING ANY OR ALL OF THE SEGMENTS

Carcinomas arising from the mucous glands begin in the large bronchi, often cause bronchial obstruction and are characterized by the secretion of abundant mucus. Carcinomas arising from the alveolar epithelium produce infiltrating masses that often spread rapidly to a lobe or to larger areas, and somewhat resemble organizing pneumonic consolidation. All carcinomas of the lung produce marked, and often early, pleural lesions. The roentgenographic shadow is characteristically demarcated and peculiarly translucent, suggestive of hyalin.

Secondary (metastatic) carcinoma in the lung is common. Metastasis from carcinoma

of the breast occurs frequently; the resulting lesions vary from the multiple minute nodules which give the impression of diffuse fibrosis to multiple nodules of varying size distributed throughout the lung fields. The roentgenographic characteristic is the sharply demarcated, smooth round nodule with a translucent shadow of a hyalin density.

Pleurisy with and without effusion may complicate the picture and extensive irradiation, resulting in pneumonitis which roentgenologically is not unlike resolving pneumonia, may add still another difficulty.

Sarcoma of bone and melanotic sarcoma almost regularly metastasize to the lung. Invasion of the bony structures by sarcoma without evidence in the lung is seen.

I have not been able to differentiate the metastasis from carcinoma from that of sarcoma. It has been of interest to observe that the "snowball" type of metastasis has been more frequently associated with primary tumors in the thyroid gland, tongue, and face. The single nodule should be considered most carefully before an opinion of its metastatic origin is offered. Not infrequently a single shadow is seen, usually near the periphery, closely resembling a primary tuberculous tubercle, or a small pleural plaque. In some cases, there is even an apparent connection between the shadow and the gland in the hilum, indicated by slightly increased thickening of the linear marking; in other cases, the margins are irregular and the translucence is less marked, suggesting commencing calcification. Similar shadows have proved at necropsy to be small metastatic areas in or close to the pleura. It would seem good practice, in case operation is contemplated, to give the patient the benefit of the doubt when the decision rests largely on the roentgen-ray data.

Miliary tuberculosis, arising from the invasion of the blood stream by tuberculosis bacilli, usually from a tuberculous focus eroding the wall of a vein, scatters small tubercles throughout the lungs, which show in the roentgenogram as a shower of minute, soft shadows evenly distributed throughout both lung fields.

The only real simulant of miliary tuberculosis is anthracosis, the type of pneumonoconiosis due to long-continued inhalation of coal dust, where pigment deposit predominates rather than fibrosis.

Fig. 3. A view of the film from the patient's back. The small extent of the upper lobe not overlapped by the lower lobe on both sides may be noted. The right middle lobe is not free in this view.

The shadows due to both are soft and diffuse; anthracosis tends to be less prominent at the upper margin of the lungs and more marked at the bases, while the converse is characteristic of miliary tuberculosis.

Echinococcus cysts may be found anywhere in the lung, but they are most common in the lower right lobe, rupturing through the diaphragm into this situation. The usual type is unilocular, and it casts a large circular shadow of varying density in the roentgenogram, dependent on the consistence of the capsule. The capsule may be so thick as to give the impression of scattered calcification through the wall.

There is nothing characteristic to distinguish actinomycosis from an abscess or empyema from any other cause.

One must appreciate that these observations are the rule but there are many exceptions.

By keeping the segments and the lesions

common to them in mind, we can eliminate, or establish, factors and thus lessen the liability of gross errors.

Direct inspection of the anatomic structure and visualization of the gross pathologic specimen and its sections, are valuable aids in interpreting roentgen-ray data.

The roentgenogram is a reproduction of the cut section in profile, and has its limitations to the roentgenologist just as the cross section has for the pathologist. Pathology as a science was built up by the correlation of the efforts of many scientific bodies; roentgenology, which after all is the study of pathology in the living, is just another unit to many investigations of the cause and result of disease.

By drawing on the resources of and keeping always in close coöperation with all these units, the interests of the individual and those of the science of medicine as a whole are best served.

Tuberculous Meningitis in Children

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A study has been made of the case histories of 47 definitely proven cases of tuberculous meningitis admitted to the Milwaukee Children's Hospital, between January 1, 1923 and October 2, 1928. This study was made in an attempt to obtain information concerning the diagnosis and prognosis of tuberculous meningitis.

It is almost a unanimous opinion in the recent text books and literature, that tuberculous meningitis is the most common of the meningidites. In the 1928 edition of Holt and Howland tuberculous meningitis is given as the most frequent form of meningitis seen in children. The observations were based on a rather large series of cases, 410: 400 of which were seen in New York City. Griffith and Mitchell, in the 1927 edition of their text, state that if epidemic outbreaks of cerebrospinal fever are excluded the most frequent form of meningitis is tuberculous. Pearson and Wyllie also state that tuberculous meningitis is the commonest form. Feer, in his third edition (1928), lists tuberculous meningitis first in his classification of the meningidites. Levinson, (1) in a recent review of literature on cerebrospinal fluid, cites the frequency of the various types of the meningidites in children treated at the Michael Reese Hospital between the years,

TABLE I

NUMBER OF PATIENTS WITH SYMPTOMS OF:

Order of Appearance	Vomiting	Change in Disposition	Anorexia	Fever	Cough	Drowsiness	Headache	Stupor	Convulsions	Pain in Abdomen	Night Cries	Focal Sympt Paralysis etc.
1st Sympt.	9 pat.	9 pat.	7 pat.	6 pat.	7 pat.	2 pat.	3 pat.		3 pat.	1 pat.	1 pat.	2 pat.
2nd Sympt.	11 pat.	4 pat.	8 pat.	6 pat.	1 pat.	5 pat.	2 pat.	2 pat.	1 pat.	2 pat.		2 pat.
3rd Sympt.	7 pat.	5 pat.	5 pat.	4 pat.	2 pat.	4 pat.	1 pat.	1 pat.	3 pat.	3 pat.	1 pat.	1 pat.
4th Sympt.	6 pat.	3 pat.		4 pat.	2 pat.	2 pat.		4 pat.	3 pat.	1 pat.	3 pat.	3 pat.
5th Sympt.		1 pat.	3 pat.		1 pat.	2 pat.	1 pat.	3 pat.	1 pat.	1 pat.	1 pat.	2 pat.
6th Sympt.						2 pat.	1 pat.		1 pat.		1 pat.	1 pat.
7th Sympt.				1 pat.		7 pat.		1 pat.				
8th Sympt.												
Total	33 pat.	22 pat.	23 pat.	21 pat.	13 pat.	24 pat.	8 pat.	11 pat.	12 pat.	8 pat.	7 pat.	11 pat.

TABLE II

TEMPERATURE ON ADMISSION

Day of Disease	Temperature (Fahrenheit) Rectal	Day of Disease	Temperature (Fahrenheit) Rectal
2nd	102.2	14th	101.4
4th	99.4	14th	101.4
4th	100.	14th	101.4
6th	100.8	14th	101.8
6th	104.	14th	102.
6th	104.	14th	102.2
7th	98.2	14th	103.2
7th	101.	21st	98.4
7th	99.	21st	101.
8th	99.6	21st	102.
10th	100.	21st	103.
10th	101.	24th	99.
10th	102.	24th	99.8
10th	99.	24th	101.4
12th	99.4	28th	100.
14th	98.6	28th	102.
14th	99.	3 months	101.
14th	100.	3.2 months	98.8
14th	100.4	4 months	102.4

In hospital Low, 96. High, 109.

TABLE III

WEEK OF DEATH AFTER ONSET

1st week	0 Deaths	4th week	8 Deaths
2nd week	4 Deaths	5th week	5 Deaths
3rd week	12 Deaths	6th week or over	4 Deaths

Shortest period—8 days. Longest period—4½ months.

CLASSIFICATION OF FINDINGS.
TABLE IV. (1).

Duration of Symptoms.	Physical Findings.																				Tuberculin Tests.			
	Conscious on Entrance.	Nutrition.	Scaphoid Abdomen.	Bulging Fontanel.	Head Retraction.	Neck Rigidity.	Strabismus.	Nystagmus.	Spine Rigidity.	Chest Findings. Physical.	Chest Findings. X-ray.	Brudzinski.	Babinski.	Clonus.	Kernig.	Other toe signs.	Exagg. knee reflex.	Eye signs. Pupil.	Abdominal reflex.	Focal Symptoms.	Pirquet.	Mantoux.	Death.	Post mortem. General miliary T. B.
1 - 8 days	+		+							+													+	
	+	P	+	0		0	+	0			+	0	0		0		+	+	0		+		+	+
		F		+	+	+		+		0							+						+	
	Semi	G				+		+		0		+	+		+		+	+					+	Men.
	+	P								0	0												+	
			+		0	+	0	0	0	0		+	+	+	+		+	+	0			+	+	
	U	G	+		+	+	+			0	+	0	0	0	0	0		0					+	+
	+	G			0	0	0	0	0		+				+	+	0	0					+	
8 - 15 "	U	G	+		+	+	+	+			0	0	+	+	0		+	+	0			+	+	
	U	G	+		+	+	+	+	+	+		+	+		+						0		+	+
	Semi	P	+		+	+	0	0	0	0				+	+		+					+	+	
	U	P	+			+						+	0		+		+	+					+	+
	+	P			+	+				+	+			+	0		+	0	0			+	+	+
	+	F		+		+	+										+	+					+	
	+	F			+	+						+			+		+	+	0				+	
	+	F	+			+	0	0				+	0		+		+	+	+			0	+	
	+	G			+	+								0	+		+	?					+	
	+	F	Dist.	+	+	+		0		0		+	+		+		+	+					+	
	+	P	0	+				+	+	0		+	+		0		?	+			+		+	
	U	G	+	+	+	+	+		+	0		0	+R				+	0		+			+	
	+		+		0	0	+			0		0	0		0		+L	0					+	
	U	G	+		+	+	+			0	+	?			+L		+L	0	0		0		+	
	U	G	+		+	+	+	+		0	0	+		+	0		+	+	0			+	+	

1908 and 1920. The following figures are given: tuberculous, 125; meningococcic, 80; pneumococcic, 21; streptococcic, 3; influenzal, 2; typhoid, 1; unclassified, 32.

During the five years, 1923 to 1927, inclusive, 154 cases of meningitis were admitted to the Milwaukee Children's Hospital. Seventy-two of these were meningococcic; 40 tuberculous; 14 influenzal; 9 streptococcic; 8 pneumococcic; 5 serous (no organisms demonstrated); 2 staphylococcic; 1 chronic basilar. In three cases the type of organism was not demonstrated. Thus, it will be seen that there are nearly twice as many menin-

CLASSIFICATION OF FINDINGS.
TABLE IV. (2).

	Physical Findings.																				Tuberculin Tests.			
Duration of Symptoms.	Conscious on Entrance.	Nutrition.	Scaphoid Abdomen.	Bulging Fontanel.	Head Retraction.	Neck Rigidity.	Strabismus.	Nystagmus.	Spine Rigidity.	Chest Findings. Physical.	Chest Findings. X-ray.	Brudzinski.	Babinski.	Clonus.	Kernig.	Other toe signs.	Exagg. knee reflex.	Eye signs. Pupil.	Abdominal reflex.	Focal Symptoms.	Pirquet.	Mantoux.	Death.	Post mortem. General miliary T.B.
8 - 15 da.	U	G	+			0	0	+		0		+L			+L		0	?	0	+	0	+	+	
	U	P	+		+	+				+	0	+	+		+		0	0			+		+	
	+					0	0	0		0	0	0	+	+				0	0		+	+	+	
	U	F	+			+	+		0	0	+	+		+	+L			+	+		+		+	
	U	P	+		+	+				0	+	+	0	+	+	+	0		0			0	+	
15-29 "	Semi	F	Dist.		+				+	+		+					+		+				+	+
	U	P	+	0	+	+	0	0	+	+		+	+	+	+	+	+	?	+				+	
	U	P	+		+	+			+	0		?			0		0	0					+	
	U	F			+	+			+	0		+	+		+		+	0					+	
	+	F		0		+	+			0	0							0					+	
	+	P	+		0	+		0	+	+	+	0	0	0	?		+R	+					+	+
	U	P	+		0	+	0	0	+			+			+	+	0				0		+	
	U	P			+																		+	
	U	P	+		+	+	+	0	+	0		+	+	0	+		+	+	0				+	
	+	P	+	+	0	0	+			0		0			0		?	+					+	
	+	P	Dist.		0	0				+	+	+	+	+	0		+	+	+		+		+	
	U	F	+	0	+	0							0		+		+		+		+		+	
90-121 "	+	P	+			+	0	0	0	+	+	+	0		+		0						+	
	+	P			0	0				+	+	0	0	0	0		+	0	0				+	
	U	P	0		+	0						+	?	0	0		+		+				+	

gococcic as tuberculous meningitis. All of these cases came from Milwaukee county.

In the Holt and Howland series, the majority of cases, 162, appeared in the infants under one year of age. In our series of cases, the largest group, 19, appeared between the ages of one and three years. There were 10 patients under one year of age, 19 patients from one to three years of age, 10 patients from three to six years of age, and 8 patients from six to twelve years of age. Griffith and Mitchell found the greatest number of their cases between the second and third years, as did Pearson and Wyllie. Neff, in Abt's Sys-

BLOOD COUNTS
TABLE V.

Days after Onset	R.B.C.	W.B.C.	Hb.	Poly.	L.L.	S.L.	L.M.	Trans.	Eosin.	Wasserman
4		13300								
4	5960000	12100	89	73	5	7	7			
7	5330000	16600		77	1	15	5			
7	4510000	14950	50	62.5	6.5	26.5	2.5			
8	5780000	22800	81	84	3	13				
8	5240000	7300	68	60	19	13		3		
10	3800000	12550	70	80	7	13				
10	6330000	11800	65	74	4	22				
11	5860000	17860	82	66	10	13				
12	5650000	15400	65	77	9	9	5			
12	3940000	21200	70	81	17	2				
14	5490000	10800	80	72	4	24				
14	5190000	21750	90	58	6	21	14	1		
14		19800		78	5	7	8	2		
14	5710000	13800	54	67	12	19				
14	4030000	18400	70	76	9	14	1			
14	5660000	12050	75	60	2	35	3			
15	4470000	18600	84	80	8	8	2	2		
15	4810000	10800	80	82	2	11	2	2		
15	5180000	19800	80	87	2	9	1	1		
15	7160000	10200	80	40	6	52	4			
15	3940000	12600	87	79	10	8	3			
21	4330000	27000	70	76		22	2			
21	4400000	15000	68	46	27	5	18		4	
22		14400		77	6	11	6			
22	4480000	12900	92	64	6	30				
24	5400000	18000	80	58	13	28	1			
28		20200		72	17	10	1			
29	3730000	14000	60	64	7	23	6			
30		9600								
31	4060000	12900	65	89	2	8		1		
3 mo.	4900000	14450	69	73	6	21				
3½ "	4480000	20000	75	73	5	19	3			
4½ "	8130000	12000	60	68	6	17				
?	3710000	8700	54	49	11	38	2			

tem of Pediatrics, states that 60% of tuberculous meningitis is seen in children under three years of age.

Sex is of no consequence. Twenty-five of our patients were females and 22 males. Forty-three patients were white and 4 colored. There was a definite history of exposure to tuberculosis in only 11 cases. Morse states that the disease often follows measles and whooping cough (2). In our patients, 16 gave a previous history of measles, 8 of pertussis, and only 2 patients had had both diseases.

While it seems to be the opinion that season is an important factor, and that the greatest number of cases are seen in winter and spring, our cases were divided through the year. There were 7 cases with the onset in May, 6 each in June and December, 5 each in February and October, 4 in April, 3 each in January, July, August and September, and 1 each in March and November.

The onset of the disease is insidious, but it is usually possible to establish a certain order in the sequence of the symptoms. The duration of symptoms before entrance to the hospital ranges from four days to four months.

Table I presents a classification of the symptoms as given in the history obtained from the parents. It will be seen that the first symptoms to appear were vomiting and a change in disposition, closely followed by anorexia, cough and fever. Thirty-three patients gave a history of vomiting, 24 of drowsiness, 23 of anorexia, 22 of change in disposition, 21 of fever, 13 of cough, 11 of stupor, and 12 of convulsions.

Table II illustrates the temperature on admission to the hospital, noting the day of the disease. The temperature in the hospital ranged from 96 F. to 109 F. There is nothing characteristic of the disease in the temperature of these cases.

Table III presents the duration of the disease. All cases terminated fatally. One patient died 8 days after the onset of symptoms, and one lived 4½ months. The largest number of patients, 12, died in the third week. In six cases the time of the onset of the disease could not be definitely established.

The physical findings on admission to the hospital are classified in Table IV. It was found desirable to classify these patients in four groups, according to the duration of

SPINAL FLUID ON ENTRANCE.
TABLE VI. (1).

Duration of Symptoms.	Pressure.	Color.	Leucocytes. Cells. Total.	Leucocytes. Polynuclears. %	Leucocytes. Lymphocytes. %	Globulin.	Sugar.	Smear. Tubercle Bacilli.	Pellicle.	Levinson.	Culture.	Wasserman.	Microprecipitation.	Guinea Pig Inoc.
1 - 8 days.	++	Clear	24											
	+	"	274			+	0	0	+		0			
	+	"	376			+					0			
8 - 15 "	++	"	88			+	54	0	+	+	0			
	0	"	331			+++	tr.	0	0	+	0			
	+	Cldy. Yell.	45	46	54	+	0	0	+	?	Cont.	0		
			117	15	85	+	41	0	0	0				
						+	0	0						
	+	Clear Cll.	115				22		+		0			
	0	Clear	171		+		0	0	+		0			
	+		94			+		0			0			
	+	Turb.	1070	31	69	++	46	+	+		0	0		
	+	Clear	100	19	81	+	32	0	0	+	0	0		
	0	"	52			+++	27	0		+	0	0	0	
	+	"	136		+	++	27	0	0	+	0			
	+	"	201			+	46	0			0	0	0	
	++	"						0	+					+
	++	Opal.				+	0	+	+	+	0	0	0	
	+++	Clear Sli. Yell.	135	20	80	++++	15		0	+	0			

symptoms before entrance to the hospital. As will be seen from the table, the physical findings depend to a certain extent upon the duration of the disease. Thus, of those admitted with symptoms of one week's duration, 4 were conscious, 1 semiconscious, and 1 unconscious. Three patients were in good nutrition, 1 fair, 2 poor, and 2 not mentioned. In the second week, 10 patients were conscious, 10 unconscious, and 1 semiconscious on admission. Seven patients were in good nutrition, 5 in fair, and 6 in poor nutrition. Of those admitted in the third week of the disease, 4 were conscious, 7 unconscious, and 1 semiconscious. Of these patients, the nutrition was fair in 4 and poor in 8. Of 3

SPINAL FLUID ON ENTRANCE.
TABLE VI. (2).

Duration of Symptoms.	Pressure.	Color.	Leucocytes. Cells. Total.	Polynuclears.%	Lymphocytes. %	Globulin.	Sugar.	Smear. Tubercle Bacilli.	Pellicle.	Levinson.	Culture.	Wasserman.	Microprecipitation.	Guinea Pig Inoc.
15 - 31 days.		Turb.	474			+	0	+			0	0	+	
	0	Clear	124	19	81	+	0		0		0			
		Straw	214			++	0	0	0		0			
							0	+	+					
	0	Clear	71			+	30	+			0			
	+	"				+	0	+		?	0			
	++	"	63		+	0		0	+			0		
	+	"	63		+	0	12.5	+	0					
	+	"	30		+	+	0	+	+					
		Cldy.	1089 2% Eos.	80	18	+++	0	+	+					
	0	Clear	10			+++	20	0	0		0	0		
		" Yell.	139	74	26	++++	25	0			Cont.			
	+	Clear				+++		+						
	+	"	50	20	80	0		0						
		"	12	8	92			+						
	+	"	192	82	18	+	0	0	0		0			
31 "	+	"	154	85	15	+	72	+	+	0	0	0	0	
	++	"	166			+	30	+	+	0	0			
5 months.	+	"	78	83	17	+	0	0	0	+	pneumo.			

patients with a history of duration of symptoms from 90 to 121 days, 2 were conscious on entrance and 1 unconscious. All three were in poor nutrition.

A note of scaphoid abdomen was made in 25 patients, distended abdomen in 3, normal in 2, no note in 13. In the infants under one year of age, a bulging fontanel is noted in 6 cases, no bulging in 2, and no mention in 2. The characteristic symptoms, regardless of the duration of the disease, may be noted as head retraction, neck rigidity, positive Brudzinski and Kernig signs, exaggerated knee reflexes, and eye signs, which include pupil inequality, dilatation, strabismus, and nystagmus.

SEQUENCE OF SPINAL FLUIDS.
TABLE VII. (1).
(Patients with three or more spinal fluids)

Patient.	Day of Disease after onset.	Pressure.	Color.	Leucocytes. Total Cells.	Leucocytes. Polynuclears. %	Leucocytes. Lymphocytes. %	Globulin.	Sugar.	Smear.	Pellicle.	Levinson.	Culture.	Wasserman.	Microprecipitation.	Guinea pig inoc.
E. H.	4	+	Clear Cll.	274			++	0	0	+		0			
	7	+	"	229			++	27	0	0	+	0			
	9	+	"	214			+++	0	0	0		0			
	15	++	"	17		+	tr.	43	0	0	0	0			
R. B.	6	++	Clear	24											
	8	+	"				+		+	+		0	0		
	9		"	63	21	79	+		0	+		0			
F. M.	7	+	Cll.	376			+				0	0			
	9		Cldy.	308			+	17							
	10		"	254	32	68	+	11		0	+	0			
	12		"	213				10		0		0			
	13			322				14		0		0			
C. P.	8		Clear Cll.	115				22		+		0			
	9	++	"							+			0	0	
	10	++	"	130			+++		0		+	0			
	11	++	"	133			++++	0	+	+		0			
D. A.	10	+++	Clear Sli. Yell.	135	20	80	++++	15		0	+	0			
	13	++	Clear Cll.	364	18	82	++++	7		+	+	0			
	16	++	"	234			++++		+	+					
D. B.	14	+	Cldy. Yell.	45	47	53	+	0	0	+	?	Cont.		+	
	15	+	Clear Yell.	684			+	0			?				
	18	++	"						+						
J. K.	14	+	Clear Cll.	100	19	81	+	32	0	0	+	0			
	17	+	"	130	10	90	+	35	0	0	?	0			
	18	0	"	58			+	36	0	+	0	0			
	19	0	"	106			+	51	0	0	0				

The blood counts Table V demonstrated nothing unusual. The red cells ranged from 3,730,000 per cm. to 7,160,000 cells in one case and the hemoglobin from 50% to 90%. The leukocytes ranged from 7,300 to 27,000 per cm.

The diagnosis of tuberculous meningitis must, of course, be made upon the positive findings in the spinal fluid. (Tables VI and VII.) In 37 of our cases tubercle bacilli were demonstrated in the spinal fluid; in 4 cases guinea pig inoculation was positive; in 2 cases x-ray diagnosis of miliary tuberculosis is our only positive evidence; and in 4

SEQUENCE OF SPINAL FLUIDS.
TABLE VII. (2).
(Patients with three or more spinal fluids)

Patient.	Day of Disease after Onset.	Pressure.	Color.	Leucocytes. Total Cells.	Leucocytes. Polynuclears. %	Leucocytes. Lymphocytes. %	Globulin.	Sugar.	Smear.	Pellicle.	Levinson.	Culture.	Wasserman.	Microprecipitation.	Guinea pig inoc.
E. Z.	14	++	Opal.				+	0	+	+	+	0	0	0	
	16	+	"	478			+	0		+	+	0			
	17	+	"	557											
	18	0	"	502			+	12							
	19	0	Turb.	640				0				0			
	20	0	"	1274				tr.				0			
L. R.	15		Straw	214			++	0	0	0		0			
	17			557			++	0	0	0		0			
	18			48			+	0	+			0	0	0	
S. S.	15	0	Clear	124	19	81	+	0		0		0			
	17		"	118	49	51	++	67		0		0			
	18		"						+	+					
M. U.	17		"	139			++++	23	0			Cont.			
	18		Yell	290	82	18	++++		+	+					
	18		"	90	72	28	+++			0					
	19	0	Clear	1370	83	17	++++		+	+		0			
	20						++	4	+	+					
	22						++++		+	+					
H. S.	22	+	" Cll.	50	20	80	0		0						
	26	++	"	110			0		0			0			
	30	++	"	100					+						
	32	++	"					46	+						
W. E.	24	0	Clear	10			+++	20	0	0		0			
	26		"	12			+++	20	0	0		0			
	28	0	"	27	92	8	+++	18	0	0		0			+
M. R.	28	++	"	63		+	0		0	+					
	33	++	"	60			+		0	0	Post mortem - +T.B. smear.				
M. S.	29	0	" Cll.	227			++	60	0		0	0			
	30	0	"	370	12	88	++	57	+	Slight	0	0			+
	31	+++	"	918	10	90			0	+		0			
	32		"	838	35	65						0			
	33			616											
F. C.	3½ mo.	++	"	166			+	30	+	+	0	0			
	1 day later	0	Turb	101	10	90									
	1 day later	0	Clear	249	54	46									
Cistern	1 day later		"	398	50	50	+	tr.	0	0	0	0			

cases post mortem examination established the diagnosis.

The characteristic findings in the spinal fluid are well known (3). A number of these patients, 12, were admitted to the hospital before 1926 and complete studies of the spinal fluids were not made. The fluids of patients admitted in 1926, 1927, and the first six months of 1928, 35, presented the following features:

The character was clear to turbid, depending upon the cell count. This ranged from 0, or no cells, in one fluid to 1,274 cells in another fluid. The average cell count was 223.

The lymphocytes ranged from 10% in one fluid to 90% of the total cell count in another, with an average of 61%. A pellicle was found in 32 cases. The globulin was positive or increased in all but one case. Tubercle bacilli were demonstrated in 32 of the 35 patients. The sugar ranged from 0, or no reaction, in one case to 72 mg. per 100 cc. in another, with an average of 27 mg. Guinea pig inoculation was positive in 3 cases in which the tubercle bacilli were not demonstrated in the smear of the fluid. The Levinson test was done in 28 cases; it was positive in 23, questionable in 2, and negative in 3 cases.

CONCLUSIONS

It will be seen that tuberculous meningitis ranks next in frequency after the cerebrospinal (epidemic) or meningococcic meningitis. The majority of our cases appeared between the ages of one and three years. They were about equally divided between the sexes. There was a history of exposure to tuberculosis in only 11 cases. The onset of the disease occurred at any time throughout the year, but was more common in February, May, June, October, and December. The first symptoms to appear were vomiting, change in disposition, anorexia, cough, and fever. The temperature chart presented nothing unusual. The cases all terminated fatally and most of them in the third week. The physical findings depended upon the duration of the disease. The most characteristic were scaphoid abdomen and the characteristic symptoms of meningeal irritation. It was possible to demonstrate the tubercle bacilli in the spinal fluid in 78% of the entire series and in 91% of the recent series, in which a special study of the spinal fluid was made. The Levinson test is an extremely valuable aid in diagnosis. It was found positive in 82% of the cases.

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THE JOURNAL CLINIC

Chylous Cysts of the Mesentery; With Case Report

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Chylous cysts of the mesentery belong to the surgical rarities. They are of interest pathologically and clinically. A diagnosis is seldom made clinically, it is usually established at the time of operation. They are also of interest clinically in that they have been known to cause volvulus and intestinal obstruction; symptomatology, therefore, is variable. The chief complaints are usually discomfort and pain.

The surgical removal of most chylous cysts of the mesentery is relatively simple, however, in some cases a more extensive procedure is required. If the cyst is unusually large, the blood supply of the bowel may be so interfered with that resection becomes necessary.

Pathologically, chylous cysts belong in that rather well-defined group of intraperitoneal cysts. The cysts are usually very large and single, but often they may occur as multilocular tumor masses or as very numerous small swellings of the mesentery, intestinal wall, omentum or in the retroperitoneal region. The contents are clear fluid or chyle, inspissated fatty material, blood is often present. The walls of the cyst are made up of fibrous tissue and in some cases

Note small cysts filled with chylous fluid.

bundles of smooth muscle fiber may be present as in enteric cysts. Klemm and Rittner interpret all chylous cysts as cystic lymphangiomas.

A man, aged 39, came to the Jackson Clinic, April 12, 1928, complaining of pain in the right lower quadrant of the abdomen which had been present for three or four months before examination. The pain was sharp and shooting in character and the duration of the attacks was usually about ten minutes. At first the attacks occurred three or four times a week, but were of daily occurrence the week preceding the operation. The patient noticed that the lower right abdomen was sore and tender on pressure. The pain had some tendency to radiate down the right leg, there had been no associated nausea or vomiting. No other complaints were referable to the gastro-intestinal, genito-urinary or other systems.

The general physical examination showed a well developed, well nournished man, temperature 98.8°, pulse 90, blood pressure 120/80, weight 135 pounds. Scalp, eyes, ears, nose, and throat were negative. Lungs and heart negative, the abdomen was not distended, a tumor mass was not visible. There was tenderness and moderate rigidity over McBurney's point. The rectal examination was negative, external genitals negative, reflexes normal. Urine examination negative, Kahn negative, blood examination-hemoglobin 95 per cent, erythrocytes 5,400,000 leucocytes 11,000 with normal differential proportion.

DIAGNOSIS

The possibility of a right ureteral condition or gastro-intestinal lesion was considered, but was ruled out so that a clinical diagnosis of chronic appendicitis was made and operation advised. Operation was performed April 18, 1928, by Drs. R. H. and A. S. Jackson. On opening the abdomen a considerable amount of chylous fluid was present, the upper abdomen was explored and found to be normal as well as the pelvis. In the region of and springing from the terminal 3 inches of the mesentery of the ileum was a multilocular lobulated gelatinous tumor mass. The mass was separated from its mesenteric bed and intestinal attachments with a moderate amount of difficulty. Bleeding was very easily controlled and no interference with the intestinal circulation resulted. The cyst was removed en masse, the appendix was found to be chronic, grade 2, and was removed. The abdomen was closed with drainage and the patient made an uneventful recovery.

The gross specimen measured 6 inches by 3 inches, it was constricted in one portion. It was made up of numerous small cysts some of which were filled with chylous fluid and others of clear fluid, some areas were gelatinous. Hemorrhage into some of the small cysts produced a mottled appearance of red, white and yellow. Sections through the wall of the cyst in several different places showed that the walls were composed of fibrous tissue and here and there a few bundles of smooth muscle fibers; in some places a lining of endothelium was present.

Sodium Barbital Poisoning; Report of a Case

By E. E. KIDDER, M. D.*
Hibbing, Minn.

Due to the ease with which barbital and other barbituric acid derivatives may be obtained at the drug stores, they have become a frequent cause of addictions and poisonings.

Since barbital was first introduced in 1903,

* Member Dane County (Wis.) Medical Society.

it has become very popular as a hypnotic, and of late years the sodium salt has been used more and more frequently. The recent use of the barbituric acid derivatives to prevent novocaine reactions has opened a new avenue of usefulness for this valuable class of drug.

The use of barbital became so common in England and Wales, that during the years of 1910–1913, it occupied seventh place in fatal poisonings. A lethal dose often has been taken accidentally and veronal also has been the drug chosen for committing suicide on many occasions, especially by persons of neurotic temperament. England finally placed barbital on the narcotic list and its sale is now regulated similarly to our own narcotic law.

Barbital and sodium barbital are rather quick acting hypnotics, generally producing sleep in one-half hour. In over-doses the symptoms of barbital poisoning are those of a depression of the central nervous system, with slow shallow respirations, slow pulse, subnormal temperature, and decreased reflexes. The pupils may be dilated or constricted, and diplopia may be present. Deep unconsciousness ensues, and they die of respiratory failure.

In other cases there may be a stimulation of the central nervous system, with delirium, increased reflexes and a rise in temperature. A case of polyneuritis and gangrene following the use of a large dose of barbital, has been reported by Claude, Lamache, and Daussy.

Barbital is excreted unchanged in the urine, 70 to 90%, but it is eliminated very slowly, sometimes taking six days. Fatal results have followed the taking of as low as 15 grains. Recovery has followed after taking doses of 125 grains, and sometimes more. Seldom has recovery ensued after taking 200 grains or more. The following case of sodium barbital poisoning is presented, because of the very large dose of the drug taken, followed by recovery:

CASE REPORT

On April 13, 1929, Mrs. H. S., age 34, white, having been depressed mentally for several months, decided to utilize a prescription for a "sleeping powder", which had been given to her for insomnia, in order to commit suicide. She asked the druggist to "double the amount called for, so I won't need to have it refilled so soon." The prescription was for sodium barbital, and she took a total of 240 grains. When seen two and one half hours later, she was in deep coma, had a pulse of 100, respirations 36, and a temperature of 98. Her breathing was rather shallow, but her color was good.

Her stomach was washed with a bicarbonate of soda solution and an ounce of magnesium sulphate was given before withdrawing tube. She was removed to the hospital and was given strychnin sulphate grains 1/40, every 5 hours, and digitalin grains 1/50 every 3 hours. Large amounts of fluid were taken by proctoclysis, and per stomach tube. Due to her comatose condition, it was easy to pass a stomach tube every two hours, and give her a pint of fluid. She received over 4000 cc. of fluids during the first 24 hours. It was necessary to catheterize her every 6 to 8 hours and from 400 to 800 cc. of urine was withdrawn each time. Urotropin grains X t.i.d were given during the period of catheterization. The urine was negative on the second and third days except for albumen one plus, and wbc one plus.

Her respirations during the entire course, were rapid, reading 54 per minute at the end of the first 24 hours. They were very shallow at times. The pulse too, was rapid, reading 126 at the end of 24 hours, and then gradually slowing down. The temperature gradually rose to 102.6 on the third day, then gradually returned to normal. The pupils were dilated for three days, and did not react to light; corneal reflexes were absent.

Deep coma lasted 36 hours, and then the patient began to move about. Full consciousness did not return until the fourth day. She had diplopia for two days.

She was discharged on the sixth day, showing no ill effects except extreme weakness. There were no sequelae.

SUMMARY

There being no specific therapy in these cases, it seems that the most important factor in the treatment is to force fluids, thereby increasing elimination. Most of the drug is excreted in the urine. In the above case an adequate fluid intake was maintained by administering fluids per proctoclysis and stomach tube.

The use of the barbituric acid derivatives is on the increase. They are habit-forming, and are often purchased with suicidal intent. These facts should be brought to the attention of our legislative bodies, and suitable laws should be enacted to regulate the sale of these drugs.

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TUBERCULOSIS and OTHER CHEST CONDITIONS

A Warning--Particularly for the Tuberculous Sick

By T. L. HARRINGTON, M. D.
Milwaukee

The ultra violet ray is potent for both good and evil. It has the power to destroy living cells as well as the power to build up the resistance of the body. In bone, joint and gland tuberculosis the ultra violet ray has proven to be of very great value. These forms of tuberculosis are not so often accompanied by fever, and perhaps because of this the harmful effects of light treatment are not frequently witnessed. The beneficial effects, particularly in bone and joint tuberculosis, are marked. Bone and joint tuberculosis are seen by the family physician less frequently than they were twenty years ago. The proportion of cases requiring surgical intervention is constantly decreasing, largely because of the increasing use of heliotherapy.

Pulmonary tuberculosis may be benefited by the intelligent use of heliotherapy but the dangers of light treatment are much greater than in the treatment of bone and joint tuberculosis.

(a) It is always dangerous to use heliotherapy in pulmonary tuberculosis when the disease is still active.

(b) Exposure of the chest to the ultra violet rays is dangerous when there has been recent activity; that is, in the quiescent and probably also in the arrested stage of the disease.

(c) In the case of arrested pulmonary tuberculosis the ray should be applied to the extremities first. The time of exposure and the area exposed should be increased slowly. When the ray of the sun or the lamp causes "sunburn", damage has been done to the individual, and the damage is in proportion to the extent and severity of the burn. It is not unusual to have a quiescent and sometimes an arrested pulmonary tuberculosis reactivate after excessive sun treatment.

(d) Remember that the blond gets the overdose much more readily than the brunette.

(e) It is still true that the most important factor in the treatment of tuberculosis is *rest*. The physician who instructs his patients with active tuberculosis to come to the office two or three times a week for quartz light treatment is violating the basic principles of heliotherapy and is running counter to the best judgment of those who have given heliotherapy in tuberculosis careful study.

(f) Heliotherapy is of definite value in the treatment of intestinal and peritoneal tuberculosis. It relieves the pain, probably improves digestion and, together with cod liver oil and tomato juice, offers at the present time the best chance for the recovery of the patient. The earlier the diagnosis is made and treatment begun, the better the chances for the recovery of the patient.

Remember

1. That both the sick and well are injured by "sunburn".
2. That the exposure of the chest is dangerous in pulmonary tuberculosis.
3. That underexposure is much safer for the patient than overexposure.
4. That the pigmentation of the skin is Nature's protection against the ray and

(Continued on page 404)

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EDITORIALS

THE SPREAD OF TRUTH

PROFESSIONS become dignified and useful by the services which they render to humanity. Professions differ from other callings in that the element of commercialism is secondary and the ideal of service is uttermost. The medical profession has become a solace to the suffering because the physician, as a man of science, gives his best in the performance of a high duty. Before life and health all other human values are insignificant.

That life is a failure which sheds no sunshine in the path of others. That profession fails to reach the dignity and hope of its founders unless humanity becomes its beneficiary.

Of what good would be the discoveries of all the laboratories if they were put to no purpose? Of what use would be insulin or the anti-toxins, unless the world learned of their value? Why gatherings of medical men unless it be to acquaint others and to exchange ideas of new health ways discovered, new methods of treatment revealed? The world makes progress only as knowledge and truth becomes a common heritage.

The good which comes to earnest practitioners from a conference with men of their own profession is but a whisper unless their knowledge can be disseminated. The weekly news service of the State Medical Society of Wisconsin is the vehicle by which the Wisconsin public learns what science can do for the suffering. It is so highly regarded that other states copy its articles.

The good to be accomplished in disseminating knowledge through the channels of the press has a double purpose. It gives the lie to the pretentions of the quack and it affords an enlightened hope to the suffering. But the good can be increased many fold by the active cooperation of every physician. Encourage your daily and local press to use the service. Commend those papers which wholeheartedly spread the truth of the achievements of the medical profession. If the days and years of life are to be prolonged for all humanity it can only be done by reaching all classes of people with the health message and the service ideals which have become the standard of that profession.

To aid us spread the truth is to help us enoble the medical profession itself. There is no room for superstitious cures when the knowledge of science is enthroned in the minds of men.

HEART DISEASE AND CHILDHOOD

A CHILD with heart disease—even though it be of a relatively mild form—is entitled to a better education than a normally healthy one. Shut off from competition for a livelihood with physically able-bodied youths in the occupations calling for great physical health, technical knowledge and skill are for them a necessity and not a luxury.

Thus another reason is given for schools

to provide competent physical examinations and intelligent medical guidance as an integral part of the educational work of the school system. The importance of guiding children from deadly and crippling infectious diseases cannot be exaggerated. But in the minds of the average parent, teacher, and school-board member, the idea of determining occupational guidance on a physical health inventory has not received the attention that intelligence demands. *H. E. D.*

TULAREMIA IN WISCONSIN

RECENTLY a death from tularemia was reported in the newspapers as occurring in Wisconsin. A post-mortem examination, however, proved the patient to have military tuberculosis involving most of the internal organs.

Tularemia was made a reportable disease in Wisconsin, at the January, 1929, meeting of the State Board of Health. Since that time no positive agglutination tests have been found by the State Laboratory of Hygiene and no cases have been reported by physicians.

During 1928 tularemia received some notoriety in the press of Wisconsin and considerable gossip was abroad indicating that numerous cases were in the hands of various physicians. However, only four cases were diagnosed through blood specimens sent to the State Laboratory, and the residence of these was not limited to any particular section of Wisconsin. In addition to these the mother of one of the above cases contracted tularemia in dressing the arm of her son. The son contracted it from skinning a rabbit. If there were other cases occurring they were not reported directly to the State Board of Health.

The seasonal prevalence of human tularemia is supposed to be co-incidental with the open season for rabbits, but the rapidly increasing knowledge of the natural history of the malady has proved that many other animals are susceptible. Lately a western state reported that two cases originated through skinning muskrats; and the coyote, sheep, ground squirrel, mice and even the quail have been found to be susceptible to the parasite. The wild rabbit of one species or another seems, nevertheless, to be the chief disseminator to man, probably because of the opportunities for close contact with the flesh of the animal. The tick of the western states (Dermacentor Andersoni) and the biting deer-fly were long ago shown to be agencies in the transmission of tularemia between infected animals and man, and now we have found out that the wood ticks of the eastern states and also bedbugs experimentally can transmit it. We should, therefore, expect an occasional case in months not covered by the rabbit season. The laboratory stands ready to aid in the diagnosis.

The frequency of the disease has thus far not been extensive enough to warrant interference with the custom of hunting rabbits and their use for food. Rubber gloves should, however, be worn in skinning rabbits and the flesh should be thoroughly cooked. Reports say that laboratory workers have contracted the malady through the unbroken skin. Therefore it remains questionable whether antiseptics can efficiently replace rubber gloves in touching the animal flesh. *C. A. H.*

MILWAUKEE COUNTY

ELSEWHERE in this issue the officers of the Milwaukee County Medical Society announce, pursuant to authority of the Society, the employment of Mr. Theodore Wiprud of Frederic as their full-time executive secretary. Mr. Wiprud is well prepared for the work he undertakes.

We take this opportunity to commend the members of the Society, as a whole, for the action which authorized this far-reaching steap in advance. It has been well demonstrated in recent years that the problems of the individual doctor are increasingly giving way to problems of the entire profession. As this is true today, so must it be evident to one who studies these problems, that their future solution will only be found in group action under a wise leadership.

It is with this in mind that we feel that the members will never have cause to regret this step and that the near future will bring them returns, both material and those not as easily demonstrable, that will more than justify their unanimous vote.

THE PRESIDENT'S PAGE

CHANGE IN ATTITUDE NECESSARY

FOR a long time the attitude of the public toward pulmonary tuberculosis and to some extent, also, that of the physician was a very pessimistic one. Phthisis was considered incurable and death was visualized in the more or less distant future. Among the uninformed this hopeless attitude still prevails and constitutes a distinct handicap to efforts of the physician in the treatment of his patient. It is a fact, however, that but few infections have as marked a tendency to heal as tuberculosis has. If it is true, as pathologists tell us, that from 80 to 95 percent of all bodies that come to autopsy show evidence of the existence of a former tuberculosis from which the patient has recovered, it would be proof enough that tuberculosis is curable, not only by treatment, but also spontaneously. The knowledge of this has brought about a change of front toward this disease, a change from pessimism to optimism. This change has been distinctly helpful to the physician in the treatment and to the patient in his chances of recovery, as is demonstrable by the greater percentage of cures of tuberculosis now effected.

A similar change of attitude is desirable; yes, necessary, in another disease, which if once it be accomplished will be revolutionary, resulting in the saving of many lives. I refer to cancer of the stomach. The public, we know, is entirely hopeless in regard to this affection and it may be said that the profession is well nigh as much so. There are reasons for this. It is a well known fact that nearly all cases of cancer of the stomach come to the physician at a time when the disease is well advanced and when already a tumor is palpable. The majority of these cases are hopeless. I say the majority. A minority, however, can be treated successfully by courageous surgery. It is reasonable to assume that if gastric cancer could be treated surgically when the tumor is still small and at a time before the tumor is palpable that this minority could be enlarged substantially. But there is the rub. The diagnosis of cancer of the stomach in its early stages is a rarity, partly because the patient does not think of the possibility of gastric cancer and permits the early symptoms of "indigestion" to go unheeded and partly because the early recognition of gastric cancer even by the physician requires great familiarity with the disease and expert equipment for diagnosis, which not every practitioner possesses. For this reason and, also, because of the predominant attitude among physicians, that if the case be a cancer nothing can be done anyway, the urgency for a prompt diagnosis of the nature of the stomach trouble is not felt and a waiting policy and a symptomatic line of treatment is adopted. This, of course, may be fatal. The physician will continue to be dilatory and half hearted as long as it is not known, that the number of cases of surgically cured cancers of the stomach, instead of being isolated and but few in number, are becoming really quite numerous.

At the 1929 meeting of the German Surgical Society in Berlin, Hans Finsterer of Vienna was able to report fifteen cases of cured gastric cancer, the patients still living and well at that time, though having been operated as far back as from five to twelve years. Finsterer, at that meeting, pointed out the same thing I had occasion to refer to at a meeting of the State Medical Society of Wisconsin in Green Bay five or six years ago, that a change of attitude toward this disease on the part of the physician is necessary. He must recognize that modern technique of stomach surgery has made gastric resection an almost safe operation even if the tumor is large. It will become much safer, of course, if the tumor be small and the cures will be proportionately more numerous. At the present time it takes an expert diagnostician to diagnose an early non-palpable gastric cancer and it requires an able but also a courageous surgeon to meet the emergency.

There was a time, even within my memory, when it took a courageous diagnostician to diagnose and an equally courageous surgeon to operate an early appendicitis. If ever we hope to salvage a greater number of patients afflicted with gastric cancer than we do now, a change of attitude on the part of the general practitioner towards this disease is necessary. A change from pessimism to one of optimism. An insistence upon a prompt, immediate and complete diagnosis, as soon as the patient presents himself, not stopping at an exploratory incision if clinical evidence points that way, is absolutely necessary.

THE STATE MEDICAL SOCIETY OF WISCONSIN

ORGANIZED 1841

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Clark	M. McGonigal, Loyal	E. L. Bradbury, Neillsville.
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Dane	H. H. Reese, Madison	C. K. Schubert, Madison.
Dodge	L. M. Bachhuber, Mayville	A. A. Hoyer, Beaver Dam.
Door	John Hirschboeck, Forestville	T. C. Proctor, Sturgeon Bay.
Douglas	E. A. Myers, Superior	J. W. McGill, Superior.
Eau Claire and Associated Counties	F. S. Cook, Eau Claire	E. E. Tupper, Eau Claire.
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Grant	C. H. Andrew, Plattville	M. B. Glasier, Bloomington.
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Green Lake-Waushara-Adams	C. U. Senn, Ripon	A. J. Wiesender, Berlin.
Iowa	A. D. Brown, Mineral Point	M. W. Trentzsch, Highland.
Jefferson	E. W. Bowen, Watertown	M. G. Peterson, Lake Mills.
Juneau	C. A. Vogel, Elroy	A. T. Gregory, Mauston.
Kenosha	H. A. Binnie, Kenosha	Margaret Pirsch, Kenosha.
La Crosse	N. P. Anderson, La Crosse	J. E. Heraty, La Crosse.
Lafayette	W. W. Peck, Darlington	S. A. J. Ennis, Shullsburg.
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Lincoln	E. K. Morris, Merrill	W. H. Bayer, Merrill.
Manitowoc	J. E. Meany, Manitowoc	A. P. Zlatnik, Two Rivers.
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Marinette-Florence	T. J. Redelings, Marinette	M. D. Bird, Marinette.
Milwaukee	H. J. Gramling, Milwaukee	E. L. Tharinger, Milwaukee.
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Oconto	R. J. Goggins, Oconto Falls	G. W. Krahn, Oconto Falls.
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Waupaca	T. E. Loope, Iola	A. M. Christofferson, Waupaca.
Winnebago	D. J. Ryan, Neenah	W. N. Linn, Oshkosh.
Wood	D. Waters, Wisconsin Rapids	W. G. Sexton, Marshfield.

SOCIETY PROCEEDINGS

DODGE

The Dodge County Medical Society held an interesting meeting at the Lutheran Deaconess Hospital, Beaver Dam, Tuesday evening, June 25th. The meeting was called to order by the secretary, Dr. A. A. Hoyer. Dr. George H. Ewell, Madison, addressed the physicians on "The Clinical Significance of Ureteral Conditions," illustrating his subject with lantern slides.

Following the scientific program, delicious refreshments were served by the hospital. Those in attendance included: Drs. E. P. Webb, Beaver Dam; R. E. Schoen, Beaver Dam; J. Karsten, Horicon; A. J. Hebenstreit, Juneau; O. F. Goetsch, Hustisford; G. H. Hoyer, Beaver Dam, and A. A. Hoyer, Beaver Dam. *A. A. H.*

EAU CLAIRE AND ASSOCIATED

The June meeting of the Eau Claire and Associated Counties Medical Society was held on the 24th at the Elks Club. Following a six-thirty dinner Dr. A. W. Bryan, Jackson Clinic, Madison, discussed "Recent Advances in Neurologic Diagnosis and Treatment." Dr. G. Hoyme, Eau Claire, spoke on "Irritable Colon." The University of Chicago-Carlson-Luckhardt-Petrolagar and Northwestern University-Kellogg-Dowd-Petrolagar films were shown by a representative of the Petrolagar Laboratories, Chicago. These films illustrated the therapeutic and physiologic action of drugs on the gastrointestinal tract. *E. E. T.*

GREEN LAKE–WAUSHARA–ADAMS

Dr. J. P. Zohlen, of the Sheboygan Clinic, Sheboygan, gave an interesting and illustrative lecture on "Diseases of the Esophagus and Stomach" before the Green Lake–Waushara–Adams County Medical Society at Ripon on Friday evening, July 5th. The talk was accompanied by the showing of numerous lantern slides portraying various abnormal conditions of the esophagus and stomach. *A. J. W.*

MARATHON

The members of the Marathon County Medical Society met on Monday, July 1st. Through the kindness of Dr. A. W. Boslough, the meeting was held at his summer cottage on the Wisconsin River just north of Wausau. A picnic lunch was served preceding the business and scientific sessions.

Dr. S. M. B. Smith discussed some matters pertaining to the commitment of patients to the county hospital which were not generally understood. Dr. W. A. Green gave a paper on "The Eye" which was very instructive. *V. E. E.*

MARINETTE–FLORENCE

The Marinette–Florence County Medical Society was entertained Wednesday afternoon and evening, July 10th, by Mr. and Mrs. Frank Lauerman at their lodge near Wausaukee.

The physicians and their wives made up a party of forty and gave a standing vote of thanks to the host and hostess for the wonderful outing they were given. The lodge is beautiful, with a fish hatchery, trout stream, small lake for boating, and scenery that would remind one of Colorado or the far northwest. *M. D. B.*

OUTAGAMIE

The crippled children program in Outagamie county and plans for the free clinic had the approbation of the Outagamie County Medical Society. The Society voted recently to cooperate in every way possible in the clinic scheduled for July. It favored the plan to invite two orthopedic physicians to examine the crippled children of the county. A committee, headed by Dr. G. J. Flanagan, Kaukauna, was chosen to confer with the crippled children committee in the selection of the two physicians.

A resolution passed by the society stated that all public clinics approved by the society would have the sanction and support of the organization. *C. D. N.*

ROCK

The Rock County Medical Society held its regular monthly meeting in May at the new tuberculosis sanatorium north of Janesville. Dr. Henry McMahon, Milwaukee, presented a paper on "Immunization Procedures in Children," and Dr. M. G. Peterman, of the Milwaukee Children's Hospital, spoke on "Cerebral Birth Injuries."

The June meeting of the society was held on the 25th of the month at the Blarney Stone, on the Morgan Memorial Golf course, Beloit. Following a six-thirty dinner, Dr. Charles E. Paddock and Dr. Carl P. Bauer, both of Chicago, addressed the members. Dr. Paddock chose as his subject "Toxemias of Pregnancy" and Dr. Bauer talked on "Sterility." Both papers were discussed by Dr. N. Sproat Heaney. This was the last meeting before the summer intermission. *H. E. K.*

TREMPEALEAU–JACKSON–BUFFALO

The members of the Trempealeau–Jackson–Buffalo County Medical Society met at Independence on Thursday, June 20th. Dr. Waltman Walters, of the Mayo Clinic, addressed the society on the subject of "Obstructions of the Upper Portion of the Urinary Tract." *R. L. MacC.*

WALWORTH

The Walworth County Medical Society held a meeting at the Sterlingworth hotel, Lauderdale lake, Tuesday evening, June 12th. The gathering was addressed by Dr. Rock Sleyster, of the Milwaukee sanitarium, Wauwatosa. He chose as his subject "Nerves and Mental Diseases." Dr. E. T. Ridgway, Elkhorn, president of the society, presided. *S. G. N.*

WINNEBAGO

The Winnebago County Medical Society met at Oshkosh on Friday, June 21st. A resolution was introduced by Dr. F. Gregory Connell, which follows:

"Dr. Wilbur N. Linn, of Winnebago County Medical Society, has served faithfully and competently as a member of the State Board of Medical Examiners for three years. In appreciation of his very satisfactory services, we urged that the State Society recommend to the Governor the reappointment of Dr. Wilbur N. Linn."

The above resolution was passed by unanimous vote. *W. N. L.*

NEWS ITEMS AND PERSONALS

Dr. Herbert Wright, former health director of Berwyn, Ill., has been appointed full time commissioner of the city of Sheboygan. He assumed office on July 1st.

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Lake Tomahawk State camp was the scene of the ninth annual midyear sanatorium conference of the Wisconsin Anti-Tuberculosis Association, held on July 6th. Sanatorium superintendents, physicians, nurses, trustees and public health nurses from all sections of Wisconsin and Minnesota attended the conference for the purpose of discussing sanatorium problems as related to the fight against tuberculosis.

Among the speakers on the program were: Dr. Hoyt E. Dearholt, executive secretary of the Wisconsin organization; Col. John J. Hannan, chairman of the state board of control; Dr. A. A. Pleyte, W. A. T. A.; Dr. F. L. Jennings, Minneapolis; Dr. W. C. Reineking, Ironwood, Mich.; Dr. J. A. Myers, Minneapolis; Dr. George W. Beebe, Eau Claire; Dr. G. L. Bellis, Wauwatosa; Dr. T. L. Harrington, W. A. T. A.; Dr. C. D. Boyd, Kaugauna; Dr. Karl E. Kassowitz, Wauwatosa, and Dr. P. A. Teschner, W. A. T. A.

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Dr. A. V. de Neveu, superintendent of the Emergency hospital, Milwaukee, was bitten by a reptile during the latter part of June while walking through bushes along the Milwaukee river near Campbellsport. It is believed that either a water spider or a water snake bit the back of his left hand, which swelled immediately. He applied first aid and was treated at the hospital upon his return to Milwaukee.

Dr. C. A. Wood, recently sold his practice at Albany to Dr. J. M. Cox, formerly of Milwaukee. Dr. Wood will be connected with the staff of St. Mary's hospital at Madison.

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Dr. I. D. Wiltrout, Chippewa Falls, deputy state health officer, spoke on "Public Health" at a recent meeting of the Eau Claire county school board.

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The Medical Protective Company, Chicago, have announced the removal of its executive offices from 35 East Wacker Drive to 360 North Michigan Blvd.

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A free clinic for crippled children sponsored by the Outagamie County Medical society and the Wisconsin Association for the Disabled, was held at Appleton on July 6th. Dr. H. C. Schumm and Dr. J. P. Blount, Milwaukee, were invited by the society to conduct the clinic.

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Dr. R. W. Roethke, Milwaukee, presided at the birth of 474 babies from June 1, 1928 to May 31, 1929, the highest total of any one physician in the state, according to the State Board of Health. Dr. E. F. Schneiders, Madison, reported acting as obstetrician at the birth of 369 babies during the year.

More complete reports of births, deaths and marriages are now being made in Wisconsin than ever before, L. W. Hutchcroft, chief statistician of the board said. This is due in part to a better appreciation of the great value of the records in safeguarding civil and property rights.

Hospitals are making a practice of thorough reports in each birth, and certificates are filled out except for the physician's signature.

Physicians, besides Drs. Roethke and Schneiders, who handled many maternity cases are: Dr. H. W. Sargeant, Milwaukee, 246; Dr. R. C. Hartman, Janesville, 230; Dr. F. S. Wasielewski, Milwaukee, 221; Dr. G. J. Schwartz, Kenosha, 217, and Dr. A. A. Skemp, La Crosse, 205.

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Dr. Maxwell Lando, of the staff of the Wisconsin Memorial hospital, Mendota, was operated upon for appendicitis the early part of July. The doctor is now well on the road to recovery.

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Dr. J. Clyde Smith, Beloit, returned home about the first of July following a two weeks' course in ophthalmology and oto-laryngology at Denver, Col.

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Dr. Gilbert H. Galford, formerly of Neenah, has now become associated with the Clinic, Ashland, where he has had charge of the eye, ear, nose and throat section. Dr. Galford is a graduate of the General Medical College, Chicago, in 1908.

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As a result of the recent Cleveland clinic disaster in which 123 lives were lost in explosions and fires caused by x-ray firms, the Wisconsin industrial

commission has issued a bulletin of advice to hospitals and clinics that use x-ray machines.

The bulletin points out that the Cleveland disaster was caused by the decomposition of x-ray films in an old coal bin and then advises:

"1. There is available a 'safety film' composed of cellulose acetate, quite as satisfactory for photographic work. It burns much slower than the nitro cellulose film, more like paper or card board. In the future use the 'safety film' only.

"2. Stocks of the flammable films on hand (dead file) should be stored in a fireproof vault on top of the main building. Such storage room or vault should have good ventilation to the outside and should be equipped with a sprinkler system designed to deliver more water than the ordinary sprinklers.

"3. A small number of such films in active use (live file) may be stored in a strong metal cabinet with vents to carry off the fumes in case of fire.

"4. Permit no smoking in vaults or rooms where films are stored or used, and see that such films are not exposed to heat from steam-pipes, electric lights.

"5. Ordinary gas masks do not protect against a heavy concentration of film gases, use oxygen helmets instead.

"6. Pay more attention to interior construction of buildings that fire or gases may not spread rapidly.

"7. None of the known tyes of fire extinguishers are satisfactory in fighting a film fire; water and much of it is the best."

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Dr. and Mrs. Arthur E. Genter, Sheboygan, left the latter part of June on an extended trip to the west and Alaska. On their way to Portland, Ore., they motored through Yellowstone and Glacier National Parks. The travelers plan to sojourn at Alaska for thirty-three days and will go as far north as the Artic circle. They expect to be gone until September.

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About one hundred and fifty alumni and graduates of the University Medical School, Madison, attended the banquet at the Wisconsin General Hospital on June 24th. Dr. Charles R. Bardeen, dean of the medical school, addressed the gathering, wishing the graduates good fortune and making a plea for a strong and enthusiastic alumni.

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Dr. Eugene A. Smith, Milwaukee, was chosen director of the new Milwaukee County Dispensaries and Emergency Hospital on July 1st. He assumed his new duties at once. Assisting Dr. Smith will be physicians, internes and nurses at all times, under the rotating schedule in effect at the county hospital.

Dr. Smith was born and reared in Madison and graduated from the Universities of Wisconsin and Pennsylvania, receiving his degree in 1898. He spent several years in eastern hospitals and dispensaries and served as prison surgeon at Waupun. During the war, he was connected with Base "22", the Milwaukee contingent in France. He has maintained offices in the Colby-Abbot building for general practice and for the past several years has been librarian of the Milwaukee Academy of Medicine.

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Dr. George H. Conklin, Superior, has been chosen as chairman of the community chest committee of that city.

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Two Japanese health specialists, Dr. U. Miura, professor of hygiene and public health at the Manchurian Medical college, Mukden, and Dr. Haruo Mizushima, fellow at Johns Hopkins university, arrived in Milwaukee the latter part of June to study public health. As guests of Dr. John P. Koehler, city health commissioner, the two Japanese visited the sewage disposal plant, the incinerator and the clinics in the city hall. They also visited the county hospital and Muirdale sanatorium at Wauwatosa.

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Dr. W. W. Coon, formerly of Gays Mills, has taken over the practice of Dr. M. R. Hadden at Walworth. Dr. Hadden will assume the practice of his father-in-law, the late Dr. J. H. Stotts, in Chicago. Dr. Hadden had worked with Dr. Stotts at times and was familiar with the Chicago practice and it was the wish of the deceased that he carry on the work in that city.

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Dr. N. B. Wagner, who has been physician and surgeon for the J. I. Case company in charge of the company's hospital at Racine for the past twelve years, has resigned to enter Rush Medical college, Chicago, to pursue a post graduate course. He will major in diseases of the eye, ear, nose and throat.

Dr. Wagner will be succeeded by Dr. T. E. Northey, a graduate of the University of Minnesota, class of 1926, who served an interneship in the Northwestern hospital at Minneapolis. He also practiced medicine at Rockford, Minn.

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Dr. G. J. Hildebrand, formerly of Sheboygan, has again established an office in that city following an absence of two years. Dr. Hildebrand left Sheboygan and went to Albuquerque, New Mexico, because of ill health. Last March he returned with his family and since that time has been doing post graduate work at the medical school of the University of Illinois in Chicago. Dr. Hildebrand will open his office in the Merchants State Bank building where he was located before leaving for New Mexico.

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Dr. C. A. Gehring, of the Henke clinic, La Crosse, returned early in July from a two months' trip to Europe. Dr. Gehring visited in Germany, Switzerland and Austria.

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Dr. R. H. Dunn, who for several years practiced at Rosholt, returned in June to resume his work. He has offices in the Post Office building.

The city council reappointed Dr. S. C. McCorkle health commissioner of West Allis early in July. Dr. McCorkle has been health commissioner of the Milwaukee suburb for fourteen years.

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Dr. W. C. Wojta of Two Rivers, has become associated with the Smith-Wiley clinic, Fond du Lac. For the past year Dr. Wojta interned at St. Agnes' hospital at Fond du Lac. He is a graduate of Marquette University Medical School in 1927.

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Dr. F. B. Welch, city health officer of Janesville, is enjoying a month's camping trip with his family at Yellowstone park and other western points of interest.

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Approximately thirty physicians from Green Bay and vicinity watched Dr. W. F. Scott, Chicago, perform three abdominal operations under spinal anaesthesia at St. Mary's hospital on June 22nd.

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Dr. J. C. Elsom, Madison, demonstrated administering first aid, with as little equipment as possible, at women's field day, Saturday, July 13th, at the University hill farm between Madison and Middleton.

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Dr. Francis Paul of Warren, Penn., has joined the staff at the Central State hospital for the Insane at Waupun, succeeding Dr. Louis Orban, who recently left for New York after three years' service. Dr. Paul will serve as senior assistant physician at the hospital. He is a graduate of the University of Munich, Germany.

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Dr. Paul L. Eisele, Milwaukee, who recently purchased the practice of the late Dr. John S. Foat, of Ripon, announced the opening of offices in the city hall building on July 1st. The offices were formerly occupied by Dr. Foat and have now been remodeled and completely renovated during the past few weeks.

Dr. Eisele graduated from the medical school of Northwestern University in 1927. He has one year of internship at the Milwaukee County hospital at Wauwatosa and the year following served as a resident surgeon in the Emergency hospital in Milwaukee.

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The preliminary program has recently been issued on the meeting of the International Assembly of the Inter-State Post Graduate Medical Association of North America. The association will meet at the new Masonic Temple, Detroit, Michigan, on October 21st to 25th, inclusive. Dr. Edwin Henes, Jr., 445 Milwaukee St., Milwaukee, is executive secretary. The joint headquarters for the meeting are at the Book–Cadillac and the Statler Hotels.

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The establishment of a clinic at Stoughton by Drs. V. S. Falk, A. S. Horn, and A. L. Olson, of that city, and R. E. Schoenbeck, formerly of Savannah, Ill., was announced recently. Operation of the organization will start about August 1st and will be known as the Stoughton Clinic, with a suite of nine office rooms. According to present plans, Dr. Falk will have charge of internal medicine and industrial surgery, while Dr. Horn will handle the physio-therapy department, diseases of children and obstetric cases. Dr. Olson will do general practice and obstetrics, while x-ray work and surgery will be in charge of Dr. Schoenbeck.

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The Catholic Hospital Association of the United States and Canada announces the removal of its general offices and the editorial offices of Hospital Progress, its official organ, from 612 North Michigan Ave., Chicago, to 1327 South Grand Blvd., St. Louis, Mo.

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Dr. Ernst A. Pohle, Madison, was elected fellow of the American College of Radiology during the American Medical Association meeting at Portland in July.

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Dr. H. P. Benn, for the past year an interne at St. Joseph's hospital at Marshfield and associated with the Marshfield clinic, has taken over the practice of Dr. L. D. Cutting, of Stevens Point, and has established his offices in the Moose Temple building with a joint waiting room with Dr. R. E. Lange, dentist. Dr. Benn is a native of Medford and a graduate of the University of Wisconsin.

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Dr. G. L. Karnopp, Wautoma, returned early in July from an extended trip through the west.

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Dr. John R. Evans, has opened offices in the Baker block, Racine. He is a graduate of Rush Medical College, Chicago, and was resident surgeon at St. Luke's Hospital, Denver, Col., for one year.

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Dr. A. M. Christofferson, Waupaca, was named consulting surgeon on the medical staff of the Wisconsin Veterans' Home at a recent meeting of the board of managers. August 4th was the date set for the laying of the cornerstone of the new hospital unit at the home.

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Dr. J. W. Lockhart, Oshkosh. was the speaker at a recent weekly luncheon meeting of the Menasha Rotary Club at Hotel Menasha.

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Dr. Frank W. Hall, formerly of Centralia, Ill., has opened offices on the fourth floor of the Goodwin block, Beloit. A graduate of Northwestern University Medical School in 1911, Dr. Hall spent his interneship at St. Mary's hospital, Rochester, Minn. The doctor served overseas during the World war.

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"Tuberculosis can be eradicated only by making provisions for the care of the child threatened with the disease and for the adult infected with the

disease." This statement was made in an address before the Kiwanis club luncheon by Dr. A. A. Pleyte, of the Wisconsin Anti-Tuberculosis Association, Milwaukee recently.

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The Clinical Congress and the Eighth Annual Meeting of the American College of Physical Therapy will be held at Hotel Sherman, Chicago, on November 4th, 5th, 6th and 7th.

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The Executive Council of the American Association for the Study of Goiter is offering a prize of three hundred dollars ($300) and a medal of honor to the author of the best essay based upon original research work on any phase of goiter, this to be presented at their annual meeting at Seattle, Wash., in September 1930.

Competing manuscripts must be in the hands of the Corresponding Secretary, Dr. J. R. Yung, Rose Dispensary Bldg., Terra Haute, Ind., by July 4, 1930, so that the award committee will have sufficient time to thoroughly examine all data before making the award.

MARRIAGES

Dr. Herbert G. Schmidt, Milwaukee, to Miss Irma Elizabeth Sichling, also of Milwaukee, on Saturday, June 29th.

DEATHS

Dr. Walter A. Ladwig, Wausau, died suddenly at his home on July 2nd following an attack of cerebral hemorrhage. The doctor was in apparently good health but a few hours before his death. The deceased, who was a veteran of the Spanish American and World wars, was born in Marshall, November 5, 1875. He took preparatory and college work at Lawrence College, Appleton, with the class of 1898, and in 1902 he received his degree in medicine from Rush Medical College, Chicago. He began the practice of medicine at Edgar, coming to Wausau in 1909.

Dr. Ladwig was a member of the Marathon County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. He is survived by his wife and one daughter.

Dr. Reginald M. Burdon, Green Bay, died July 1st following a heart attack with which he was stricken as he stepped from the running board of his automobile. Dr. Burdon was born near Green Bay, June 7, 1874, receiving his primary education in the public schools of Green Bay and graduating from high school in 1892. In 1899 he graduated from the University of Pennsylvania School of Medicine. He practiced at Houghton, Mich., for several years, coming to Green Bay in 1906.

The deceased was a member of the Brown-Kewaunee County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. His wife and two small sons survive.

Dr. Leighton P. Allen, Oshkosh, died at Mercy hospital on Sunday evening, June 24th. Death was attributed to cerebral embolism following an operation. Dr. Allen had been in active practice as eye, ear, nose and throat specialist, until he was taken to the hospital. He was born July 11, 1866, at Newark, N. J., and graduated from the University of Michigan Medical School in 1889. He began the practice of his profession in Oshkosh in November, 1889, and followed the work of general practitioner for several years. In 1891 he took a post graduate course in the Chicago Polyclinic institute and in 1896 finished an advanced course in the New York Ophthalmic and Aural institute.

During the course of his professional career, he was assistant surgeon and afterwards oculist and aurist at the Maple Lodge sanitarium. In 1904 he was oculist and aurist at St. Mary's hospital of Oshkosh.

Dr. Allen was a member of the Winnebago County Medical society, the State Medical Society of Wisconsin, the American Medical Association, and the American College of Surgeons. At the time of his death he was president of the Milwaukee Oto-Ophthalmic society. He is survived by his wife and a son.

Dr. Morris Morrison, Westby, died Sunday morning, June 30th, after a brief illness. He had been in failing health for several years, and had been able to give only limited time to his practice in late years. Dr. Morrison was born in 1873 and graduated from the University of Michigan Medical School in 1897. The deceased was county physician of La Crosse county from 1900 to 1903. He left La Crosse in 1909, practiced at Cashton for fifteen years and came to Westby but recently.

Dr. Harry McCabe, Milwaukee, died at his home on June 25th following a year's illness. Dr. McCabe was compelled to give up his practice last December because of illness and had been at his home since then. Born in Watertown in 1881, Dr. McCabe came to Milwaukee when eight years of age. He graduated from South Division High school and from the Wisconsin College of Physicians and Surgeons, Milwaukee, in 1904. During the World war Dr. McCabe was medical officer in Evacuation Hospital 32. He was once chief of staff at St. Mary's hospital, and more recently on its advisory board. He was also vice president of the nurses' school at St. Joseph's hospital, a staff member at the Emergency and county hospitals and an advisor at St. Francis seminary and the House of Good Shepherd.

Dr. McCabe was a member of the Milwaukee County Medical Society, the State Medical Society, and the American Medical Association. Surviving are two sisters and two brothers.

Dr. Clark W. Voorus, died at his home in Beaver Dam on Sunday, July 8th. The doctor had been in failing health for the past three years. Dr. Voorus was born on April 7, 1851 in the township of Manlius, N. Y., and graduated from Rush Medical Col-

lege, Chicago, in 1877. After practicing medicine in the eastern part of Dodge county, he came to Beaver Dam forty-two years ago. During his life in Beaver Dam, Dr. Voorus was the superintendent of schools and also city physician for a number of terms and until three years ago was actively engaged in his practice. Surviving are his wife, a daughter and a son.

Dr. Holley E. Clawson, Redgranite, died Friday morning, June 21st, at St. Agnes' hospital, Fond du Lac. Death was caused by Malta fever from which he suffered for the past two years. He had been confined to his bed for ten months.

Dr. Clawson was born in October, 1878, at Rushville, Ind., and was a graduate of Illinois Medical College, Chicago, in 1907. He practiced medicine in Redgranite for more than twenty-five years. The deceased was a member of the Green Lake–Waushara–Adams County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. His wife and four children survive.

Dr. Paul A. Lewis, bacteriologist, died Sunday, June 30th, in Bahia, Brazil, of yellow fever, the prevention of which he had dedicated his life. Dr. Lewis was associated with the Rockefeller institute for medical research at Princeton, N. J., and was one of a group of Americans seeking more efficient methods in combating yellow fever. He was educated at the University of Wisconsin and the Wisconsin College of Physicians and Surgeons, Milwaukee. His wife survives him.

CORRESPONDENCE

The Basic Science Law

July 17, 1929.

Wisconsin State Medical Society,
George Crownhart, Executive Secretary,
Madison, Wisconsin.

Dear Mr. Crownhart:

In the interests of better medical education I would like to ask you if you can give me some of the details concerning the passage of the Basic Science Law there in the state of Wisconsin. I used to be a member of the Wisconsin State Medical Society and feel that the state of Wisconsin is a very progressive state in many ways. Since I have come to ----------, which, by the way, is my home state, to practice medicine I find regulations and laws pertaining to the practice of medicine and the licensing of physicians and other practitioners of the art of healing in a deplorable state. It is such that anyone who can pass the state board, be he a graduate of a good school or not or of no school almost, even without the degree M. D., may practice medicine and surgery. We have many chiropractors and osteopaths who are practicing medicine and surgery, and who get by with it because of ---------- laws. Even a Swedish masseur, if he could pass the board, could practice medicine. In fact, I know of one such who did, was and is.

But, aside from all this palaver, I believe the Basic Science Law is a solution to the problem, in a way. If we could only get it in here I believe it would do much good. Other states are taking it up, so I do not see why we cannot. Somebody has to get it started, and my interest is aroused. Perhaps I can do something. If you have any information on the subject which you think would aid in getting it started in another state I should be glad to have the same. How do you get the thing started, etc? How do you get the interest of physicians, etc., who are slow to take up a new thing, even though it be for their own good?

Anything you have will be appreciated. Best of regards personally, though you may not remember me.

Fraternally,

SOCIETY RECORDS

New Members

Bentley, John E., Portage.
Andrews, W. C., Frederic.
Ware, Frank A., Potosi.
Banfield, S. R., Edgar.
Sinaiko, A. A., Shafton Blk., Stevens Point.

Changes in Address

Schulz, H. A., Fremont, to Greenwood.
Wood, C. A., Albany, to 1162 Emerald St., Madison.

Wisconsin spent $1,533,489.83 for the year 1928 under the Aid to Dependent Children's law. The figures revealed from the State Board of Control's annual audit of the county treasurers' statements show that 6,274 families with 16,532 children were aided. The expense of this law is borne entirely by the counties save for the State's appropriation of $30,000 which was pro-rated, not being sufficient to reimburse the counties one-third of the amount they expended, as contemplated by law.

The Aid to Dependent Children's law has been in operation since 1913, Wisconsin being one of the early states to enact a law granting aid to families of dependent children in order that the home may be maintained and the children assured of a mothers' care and training. The law has been in operation in all counties for several years.

The audit further shows that 1,543 new pensions were granted during the year, 2,944 were con-

tinued, 215 were increased, 509 decreased, and that 1,063 were discontinued. In 1928 the average family allowance was $25.46 per month and the average allowance per child amounted to $9.60 per month. The causes of the dependency were given as 3,599 widows, 884 husbands in penal institutions, 147 orphans, 36 because of children of illegitimate birth, and 11 maternity aid.

Governor Kohler has signed a bill providing that certain examinations for tuberculosis may be made in branch laboratories and accredited municipal laboratories, as well as in the state laboratory. He also signed a measure providing that non-profit hospital corporations may authorize bond issues by majority vote of the members present at a meeting called for that purpose.

Repeal of the state dry act with its provisions for licensing by the state of nonintoxicating beverages, leaving this field entirely to municipalities, will deprive the state of nearly $40,000 in revenue, the state treasury reported. The state tax amounted to $39,000 during the last fiscal year ending July 1.

John H. Spearing, Jr., 17, of Milwaukee has been selected as the Wisconsin representative in the Thomas A. Edison scholarship contest.

The selection was announced by John Callahan, state superintendent of schools, in a letter to Governor Kohler. Everett Hymen of 1417 Downer avenue, Shorewood, a student in the Shorewood High School, was chosen alternate. The winner in the national contest, to be held later between the state contestants, will be given a university education on the scholarship funds and will have the additional privilege of personal association with Mr. Edison in his laboratories. The winner will have the opportunity of working with Edison and of preparing himself to carry on the electrical wizard's work after the latter's death.

Governor Kohler has made many important appointments recently. He named James B. Borden as director of the state budget, a post similar to the one he held until Governor Zimmerman fired him, and he named Jerry Donohue, Sheboygan; Karl G. Kurtenacher, Madison; and Fred J. Seguin, Superior, as members of the new highway commission.

Wisconsin has now placed a definite check on the amount of tax that municipalities can levy on bus lines that travel through their streets with Governor Walter J. Kohler signing the Rohan bill. Cities in need of revenue have run up high special fees on busses that traveled their streets with the city of Menasha assessing a tax of $300 per vehicle. These busses operating over a route that took in a number of cities found themselves faced with a tremendous local tax besides the high tax fixed by the state itself.

With the majority of the assembly members in favor of entirely closing the deer hunting season the legislature may reach a compromise by shortening the hunting season every other year from 10 to 5 days.

The senate by an overwhelming vote killed the Lacy bill to entirely close the deer season. Resort owners of the north and others feel the deer are worth more alive to the state than the privilege of hunting. Those interested in general conservation point out that entirely closing the deer season would mean a loss in revenue to the conservation funds between $60,000 and $70,000.

With the last session of the legislature aiding the poorer schools through the Callahan equalization law by raising about $6,200,000 for their support, the present legislature seems inclined to pass the Loomis bill to increase state aid to high schools by about $2,617,000.

The finance committee recommended the Loomis bill for passage by a vote of eight to one and the assembly has engrossed it. The high school aid bill differs from the Callahan law in that it has no equalization feature but gives to each high school on the basis of the number of pupils enrolled.

Under the present law high schools receive an average state aid of about $600. Under the new law each high school will receive an aid determined by the multiplication of $35 with the number of pupils enrolled. The aid goes for ninth, tenth, eleventh and twelfth grades of high schools and state graded schools.

The legislature seems about to open the university to those students who graduate from high school and want to take certain subjects without enrolling in a general course for a degree. Assemblyman Carlton W. Mauthe, Fond du Lac, has introduced a bill to grant more freedom to students and this has passed the assembly and been advanced in the senate.

If this bill is enacted into law a boy or girl after graduating from high school can take only desired subjects at the university and entirely ignore the so-called culture studies. Assemblyman Mauthe points out that now if a high school graduate wants to take only certain work it is often necessary to go to school for two or more years before these studies can be followed.

Sterilization of 39 inmates of the Northern Wisconsin colony and training school at Chippewa Falls was ordered recently by the state board of control after hearings. There are 37 females and two males in this group.

The board of control announced that it had considered the cases of 62 patients and that in seven of these 62 cases the parents or other relatives objected to the operation and that in the balance of cases the period of 30 days notice upon relatives had not yet expired so that the board could not act.

Under the present Wisconsin law the sterilization of imbeciles is permitted providing the parents or other relatives do not object.

State Senator Glenn D. Roberts, of Madison, has a bill pending in the legislature which would allow the sterilization of feeble-minded persons without the consent of parents or relatives.

Approximately 36,000 acres of state owned lands in two townships near Tomahawk Lake in Oneida county will make up Wisconsin's fifteenth state park, to be known as the American Legion State Park and Forest Preserve. The bill creating this park recently passed both houses and was signed by the governor.

This new park, according to Mr. C. L. Harrington, superintendent of forests and parks, will be used primarily as a forest preserve. Intensive park development could not be carried on, Mr. Harrington says, in such a large area, and it is rather close to other state parks.

Included within the area set aside for park purposes is 5,000 acres which the American Legion had posted as a game refuge and had patrolled in past years. The conservation commission had erected a fire lookout at the request of the American Legion, and the legion had helped pay for it and patrol the area.

The senate killed the finance committee bill to abolish newspaper publication of law supplements.

The assembly gave final passage to Senator John Cashman's bill permitting two years of advanced courses in all rural schools. Such schools are entitled to ten grades under this measure.

The Blanchard bill exempting radios from taxation by definitely classifying them with other household furniture was engrossed and then sent to the house by a vote of 15 to 11. It is now before the assembly.

The senate killed the Meyer bill requiring all dance halls have water and toilet facilities within the hall. The bill was pushed on the ground that if people leave the dance halls there is more incentive to indulge in petting about the premises.

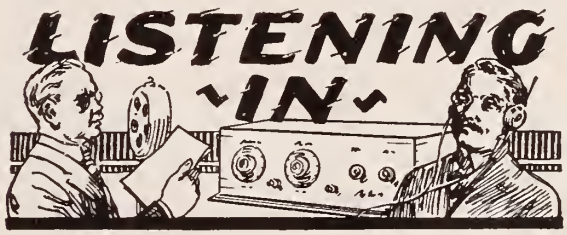
Eight men under direction of Dr. E. A. Birge, president emeritus of the University of Wisconsin, are spending another summer of work among the lakes of northeastern Wisconsin in an effort to study the contents of lakes, a task which Dr. Birge began 30 years ago.

Last summer samples of lake water and low forms of lake life were collected for the study of lake productivity from 229 bodies of water. The study will be a basis for a scientific conservation of lake life. This year more work will be done on lakes already surveyed, and about 100 new lakes will be visited.

The study of "fish pasturage" is conducted officially by the Wisconsin Geological and Natural History survey. Headquarters is at the Trout Lake State Forestry nurseries.

Two projects in the University of Wisconsin, a summer service for high school graduates and their parents and a special freshman period in the fall, will be repeated this year following success of the program last year, announces President Frank. These projects are steps in a program to offer service of intimate counsel to Wisconsin students throughout their four years at the University.

The summer service and the freshman period are designed to make the transition from high school to college life easier and more natural, explain officials.



AT THE PORTLAND SESSION

Upon arrival we learn of the hard luck that overtook Dr. F. E. Butler of Menomonie. The doctor purchased a new Packard eight in May so that it would be all in readiness for the trip to Portland and a vacation trip following the meeting. Just west of Butte it was noticed that the engine seemed to be missing but nothing could be found wrong. A few minutes later it burst into flames. The personal effects of the family were saved but the car burned into a twisted mass while the occupants of other cars watched at a safe distance.

* * *

On the way out your Secretary was the speaker at the dinner meeting of the Idaho State Medical Association. We ask each in turn, as introduced, their home and we learn to our astonishment that Idaho is a state of great distances and found few members that had not driven at least four hundred miles to attend the sessions and many that had driven for two days.

* * *

Attending their House of Delegates we were amazed to hear delegate after delegate arise to urge the continuance of dues at $40 a year. While there was discussion as to the proper expenditure of the sum raised, no one was against $40 a year dues.

* * *

Dues are $20 a year in Colorado where Mr. Clyde C. Foley, Wisconsin born, is full time Secretary. We spend several hours at his headquarters learning of his work and problems.

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Milwaukee members who are taking over the Physicians Service Bureau of that city will be in-

terested to learn that the Portland Bureau has cut the cost to the member $3 a year and yet is able to finance additional work by the Society.

* * *

We bring back a whole notebook filled with messages from former Wisconsin men now on the coast to their friends "at home".

* * *

The Wisconsin official delegation are found at the Multnomah Hotel. Here we meet Dr. Gurney Taylor who in turn is meeting the "class of '94 and the A. M. P. O's"; Dr. Joseph Smith who is renewing acquaintances in the House; Dr. W. E. Bannen who has sent the family to the seashore "because conventions are a bore"; and Dr. Rock Sleyster, Trustee, who seems to know everyone that Dr. Taylor knows, plus a few.

Meeting the genial secretary of Minnesota, your Secretary exclaims over the dues in the West only to be reminded that dues at $15 in Minnesota in addition to a $5 a year annual re-registration fee.

* * *

Dr. Hans Reese of Madison hails us. We bump right into Dr. N. P. Anderson of La Crosse. Dr. Edward Evans of Minneapolis greets us at the Elks Club. We look for Dr. Carl Henry Davis but fail to connect.

* * *

Wisconsinites are a unit in agreeing that Portland is a fine city but that the drivers take the cross streets at a rate that makes us hold our breaths. To jay walk in Portland is the equivalent of saying good bye to your friends.

Program for September Annual Meeting at Madison Announced; Dr. W. A. Pusey to Give Annual Dinner Address

With the announcement of a practically completed scientific program for the 88th Annual Meeting of the State Medical Society at Madison, September 11-13th, arrangements are now complete for the three-day sessions. As announced in the July issue, the sessions on Thursday and Friday morning will be divided in four and five separate rooms for round table discussions of widely varied subjects following presentations by invited guests.

An innovation of the program will be the program of the first morning, September 11th, at which three subjects concerning medical practice in its broad aspects will be presented. Dr. Olin West, Secretary and General Manager of the American Medical Association will speak on "Opportunities and Trends in the Practice of Medicine;" Fred M. Wylie, Attorney, will discuss Wisconsin laws and rulings affecting medical practice and Prof. R. R. Aurner of the University of Wisconsin will speak on collections and collection methods. These three subjects were selected by upwards of 500 members following a questionnaire to determine whether such material was desired.

"Problems in the Corporate Practice of Medicine" will be the subject of the Annual Dinner address by Dr. W. A. Pusey of Chicago, Past President of the American Medical Association. Dr. Pusey has been making a special study of the trends of practice for the past several years and is known nationally for his medical statesmanship.

Among the out-of-state guests who will appear on the scientific program are: Dr. F. C. Rodda, Minneapolis; Dr. Herman Kretschmer, Chicago; Dr. A. W. Adson, Rochester; Dr. F. J. Hirschboeck, Duluth; Dr. Ralph Major, Kansas City; Dr. John H. Musser, New Orleans, President of the American College of Physicians; Dr. Harold O. Jones, Chicago; Dr. Harry Wahl, Kansas City; Dr. C. F. McClintic, Detroit; Dr. F. S. Smyth, St. Louis; Dr. Charles G. Sutherland, Rochester; Dr. Joseph Barcroft, Cambridge, England; and Dr. George Heuer of Cincinnati. The program as announced by Dr. W. G. Sexton, Chairman, follows:

WEDNESDAY—SEPTEMBER 11th

8 to 9 A. M.

Registration, Memorial Union Building.

Wisconsin Laws and Legal Rulings as They Pertain to Practice of Medicine—Fred M. Wylie, Attorney at Law, Madison.

The Doctor and His Collections—Prof. Robert R. Aurner, Department of Business Administration, School of Commerce, University of Wisconsin, Madison.

Alkalosis—Dr. W. J. Tucker, Ashland Clinic, Ashland.

Discussion—Dr. H. C. Bradley, Madison.

Fat Embolism—Dr. E. L. Miloslavich, Milwaukee.

Discussion—Dr. W. J. Carson, Milwaukee.

Opportunities and Trends in the Practice of Medicine—Dr. Olin West, Secretary and General Manager, American Medical Association, Chicago.

2 P. M.

Bronchoscopy—Dr. Wellwood M. Nesbit, Madison.
Discussion—Dr. Lyman A. Copps, Marshfield.
Spinal Cord Tumors—Dr. Loyal Davis, Chicago.
Discussion—Dr. Merritt Jones, Wausau.
Sterility—Dr. Roland S. Cron, Milwaukee.
Discussion—Dr. Carl Harper, Madison.
Prostatic Obstruction — Dr. Herman Kretschmer, Asst. Clin. Prof. Surg. (Gen. Urin.), Rush Medical College, Chicago.
Discussion—Dr. Cyril G. Richards, Kenosha.
A Study in the Wisconsin Maternal Mortality, 1927 and 1928—Dr. Charlotte Calvert, State Board of Health, Madison.
Gas Treatment of Malignant Tumors—Prof. Bernard Fisher, Prof. of Path., University of Frankford, Germany.

8 P. M.

Open Meeting.

9:30 P. M.

Smoker.

THURSDAY—SEPTEMBER 12th

8:30 to 9:45 A. M.

Room A

Chairman—Dr. Joseph F. Smith, Wausau.
Spinal Anaesthesia—Dr. Ralph M. Waters, University of Wisconsin, Madison.
Discussion—Dr. R. B. Stout, Jackson Clinic, Madison.

9:45 to 11 A. M.

Use and Abuse of Forceps—Dr. John Harris, Prof. Obstetrics, University of Wisconsin, Madison.
Discussion—Dr. J. B. Vedder, Marshfield.

8:30 to 9:45 A. M.

Room B

Chairman—Dr. Hart Stang, Eau Claire.
Pernicious Anemia—Dr. Wm. S. Middleton, Assoc. Prof. Clinical Med., University of Wisconsin, Madison.
Discussion—Dr. T. L. Szlapka, Milwaukee.

9:45 to 11 A. M.

Massive Atelectasis of the Lungs—Dr. F. J. Hirschboeck, Duluth.
Discussion—Dr. H. M. Coon, Stevens Point.
Dr. A. A. Pleyte, Milwaukee.

A portion of the main meeting room

8:30 to 9:45 A. M.

Room C

Chairman—Dr. Arthur W. Rogers, Oconomowoc.

Neuro-Syphilis—Dr. W. F. Lorenz, Prof. Psychiatrics, University of Wisconsin, Madison.

Discussion—Dr. W. J. Bleckwenn, Madison.

9:45 to 11 A. M.

Cardiac Decompensation—Dr. Francis D. Murphy, Asst. Clin. Prof. Med., Marquette Univ., Milwaukee.

Discussion—Dr. H. P. Greeley, Madison.
Dr. G. Hoyme, Eau Claire.

8:30 to 9:45 A. M.

Room D

Chairman—Dr. Gregory Connell, Oshkosh.

The Value of Sympathetic Ganglionectomy and Trunk Resection in the Treatment of Raynaud's and Allied Vascular Diseases—Dr. A. W. Adson, Asst. Prof. Surg., Mayo Clinic, Rochester.

Discussion—Dr. J. L. Yates, Milwaukee.

9:45 to 11 A. M.

Nephritis—Dr. Ralph Major, Prof. Medicine, University of Kansas, Kansas City, Mo., and Dr. Harry Wahl, Prof. Pathology, University of Kansas, Kansas City, Mo.

Discussion—Dr. Louis M. Warfield, Milwaukee.

In the Rathskellar

11 A. M.

Main Auditorium

Annual Oration in Medicine. The Normal and the Diseased Heart—Dr. John H. Musser, President, American College of Physicians, and Prof. Medicine, Tulane University, New Orleans, La.

Noon

Alumni Luncheons.

2 P. M.

President's Address. The Form of Disease; the Clinical Picture and the Individual—Dr. K. W. Doege, Marshfield Clinic, Marshfield.

Recent Diagnostic Aids in Gynecology—Dr. Harold O. Jones, Chicago.

Discussion—Dr. Joseph Dean, Madison.

Use of Pituitrin in Obstetrics—Dr. Warren E. Leaper, Green Bay.

Discussion—Dr. D. T. Jones, Wausau.

The Relation of the Pathologic Lesion of Goitre to Its Clinical Picture—Dr. A. L. Mayfield, Kenosha.

Discussion—Dr. E. F. Bickel, Oshkosh.

Pathology of Gall Bladder—Dr. Harry Wahl, Dean of School of Medicine, University of Kansas, Kansas City, Mo.

Discussion—Dr. C. H. Bunting, Madison.

Minor Disabilities of the Knee—Dr. F. E. Turgasen, Manitowoc.

Discussion—Dr. D. L. Dawson, Rice Lake.

7 P. M.

Annual Dinner (Informal)—Great Hall, Memorial Union Building. This dinner is given to honor this year all past presidents of the Society. Speaker of the evening—Dr. William Allen Pusey, Past President, American Medical Association—Problems in the Corporate Practice of Medicine.

FRIDAY—SEPTEMBER 13th

9 to 10:30 A. M.

Room A

Chairman—Dr. Joseph F. Smith, Wausau.

Treatment of Trophic Ulcers and Other Nervous Diseases by Alcoholic Injections—Dr. C. F. McClintic, Detroit.

Discussion—Dr. Hans Reese, Madison.

10:30 A. M. to 12

Thyroid Disorders—Dr. Arnold Jackson, Jackson Clinic, Madison.

Discussion—Dr. K. H. Doege, Marshfield.

9 to 10:30 A. M.

Room B

Chairman—Dr. Hart Stang, Eau Claire

Hematuria—Dr. J. C. Sargent, Milwaukee.

Discussion—Dr. Alf Gundersen, La Crosse.
Dr. C. J. Smiles, Ashland.

Corner in the rest room, Memorial Union.

10:30 A. M. to 12

X-Ray in Duodenal Ulcer—Dr. Charles G. Sutherland, Mayo Clinic, Rochester.
Discussion—Dr. J. A. Evans, La Crosse.

9 to 10:30 A. M.

Room C

Chairman—Dr. Arthur W. Rogers, Oconomowoc.
Oxygen Treatment of Pneumonia—Dr. John Pink, Milwaukee.
Discussion—Dr. Wayne A. Munn, Janesville.

10:30 A. M. to 12

Diabetes—Dr. C. C. Edmondson, Waukesha.
Discussion—Dr. F. G. Anderson, Eau Claire.

9 to 10:30 A. M.

Room D

Chairman—Dr. Gregory Connell, Oshkosh.
X-Ray as a Diagnostic Aid in the So-Called Nervous Patient.—Dr. F. W. Mackoy, Sacred Heart Sanitarium, Milwaukee.
Discussion—Dr. F. J. Hodges, Madison.

10:30 A. M. to 12

Pediatric Clinic—Dr. F. S. Smyth, Washington University, St. Louis, Mo.
Discussion—Dr. J. E. Gonce, Madison.

9 to 10:30 A. M.

Room E

Chairman—Dr. Stanley J. Seeger, Milwaukee.
_____—Dr. Nelson M. Black, Milwaukee.
Discussion—Dr. E. H. Brooks, Appleton.

10:30 A. M. to 12

Gastric Surgery—Dr. Alfred A. Strauss, Chicago.
Discussion—Dr. E. V. Smith, Fond du Lac.

Noon

Luncheon—Radiological Section.

2 P. M.

Address by the President-Elect—Dr. Frederick J. Gaenslen, Milwaukee.
Spontaneous Pneumothorax—Dr. T. W. Nuzum, Pember-Nuzum Clinic, Janesville.
Discussion—Dr. J. W. Lockhart, Oshkosh.
The Present Status of Radiation Therapy in Pediatrics—Dr. Ernst A. Pohle, Prof. Radiology, University of Wisconsin, Madison, and Dr. H. K. Tenney, Madison.
Discussion—Dr. Gentz Perry, Rhinelander.
Subject Later—Dr. Joseph Barcroft, Prof. Physiology, Cambridge University, Cambridge, England.
Annual Oration in Surgery. Heliotherapy in Medicine and Surgery—Dr. George Heuer, Prof. of Surgery, Cincinnati University, Cincinnati, Ohio.

Organize Woman's Auxiliary Thursday; Fishbein to Speak

Wives of the members from every section of the state are invited to attend a luncheon in the Trophy Room of the Memorial Union building on Thursday noon. This luncheon, given by the State Society, will be followed by the organization meeting of a state auxiliary to which the wives, daughters and sisters of the members will be eligible for membership. The organization will be in charge of a committee appointed to consist of Dr. Jessie P. Allen, Beloit; Dr. Eleanore Cushing-Lippitt of Milwaukee and Dr. Elizabeth Comstock of Arcadia.

Immediately following the organization, Dr. Morris Fishbein, Editor of the Journal of the American Medical Association, will address the Auxiliary on the fields of effort that are open for service to the profession. Bridge will conclude the afternoon, the ladies joining the members for the Annual Dinner that evening.

Entertainment Includes Golf, Smoker, Dinner and Alumni Luncheons

Beginning with the annual golf tournament to be played on Tuesday, September 10th, several events have been arranged for the entertainment of the members. The golf tournament will be in charge of Dr. R. C. Blankinship of Madison whose appointment as the "core" has been announced by President K. W. Doege.

On Wednesday evening the members will adjourn to the Rathskellar and Trophy Room of the Memorial Union Building where round tables that once adorned "Dad Morgan's" will seat the members in small groups. Entertainment will be varied during the evening and the old Hausmann bar will again see the free lunch.

Thursday noon will be devoted to the alumni luncheons and special room will be devoted to the alumni of Rush, Northwestern, Michigan, Wisconsin, Marquette, Pennsylvania, Chicago P. and S. and Illinois. On Thursday evening the members and their wives will attend the Annual Dinner, informal, at which Dr. W. A. Pusey of Chicago will be the speaker of the evening. A luncheon for the Radiological Section will be held on Friday noon.

House of Delegates to Meet Tuesday Evening, September 10th

Opening its sessions at seven Tuesday evening, September 10th, the members of the House of Delegates will find a mass of important business before them. Reports of officers and committees will be found elsewhere in this issue. These reports and their recommendations will be acted upon by the House. The report of the Council on the future work which it is suggested that the Society undertake together with its financial report will have the special attention of the delegates.

Officers to be elected at this meeting include councilors to succeed the following whose terms expire with this meeting: Dr. Edward Evans of La Crosse, Dr. T. J. Redelings of Marinette, Dr. Joseph F. Smith of Wausau, and Dr. H. M. Stang of Eau Claire. The House will also fill the unexpired term of Councilor J. L. Shaw of Manitowoc, resigned.

Hotel Reservations Urged

Members are urged to make hotel reservations at this time. While Madison has ample hotel facilities, confusion will be avoided and desirable rooms obtained by making reservations at the hotel of choice at this time. For the convenience of the members the principal hotels with rates are given herewith:

BELMONT HOTEL:

Room without bath single, $2.00
Room without bath double, $3.50
Room with bath single, $2.50 and $3.00
Room with bath double, $4.00 and $4.50
Twin beds and bath, $5.00 and $5.50

HOTEL LORAINE:

Single room without bath, $2.00 per day. Single room with bath, $3.00 and up per day. Double room without bath, $3.50 and $4.00 per day. Double room with bath, $5.00 and up per day.

NEW PARK HOTEL:

Rooms with lavatory and toilet, single, $2.00 to $2.50; double, $3.00 to $4.00.

Rooms with bath, single, $2.50, $3.00, $3.50; double $4.00 and $5.00.

Rooms with bath and twin beds, $6.00 and $7.00.

Rooms without bath or toilet but with running water, single, $1.50 to $2.00; double, $2.50 to $3.50.

Exhibit Space Sold Out

All exhibit space for the 88th Annual Meeting was reserved at the end of the first week in July, two months before the meeting. Exhibitors will include:

Abbott Laboratories, North Chicago.
Burdick Company, Milton.
Deshell Laboratories, Chicago.
Dry Milk Company, New York.
Hanovia Chemical & Mfg. Co., Newark, N. J.
Horlick's Malted Milk Corp., Racine.
E. H. Karrer & Co., Milwaukee and Madison.
Kelley Koett Mfg. Co., Covington, Ky.
Kremers-Urban Company, Milwaukee.
Mead Johnson & Co., Evansville, Ind.
Medical Protective Company, Chicago.
Mellin's Food Company, Boston, Mass.
Pengelly X-Ray Company, Milwaukee and Minneapolis.
Roemer Drug Company, Milwaukee.
Saunders Company, Philadelphia.
Spencer Lens Company, Chicago.
E. R. Squibb & Sons, New York.
Victor Mueller Company, Chicago.
Victor X-Ray Corp., Chicago and Milwaukee.

AMONG THE EXHIBITS

ABBOTT LABORATORIES

One of the most successful and highly respected pharmaceutical houses of the United States, the

Abbott Laboratories, will exhibit their specialties at the Madison meeting of the State Medical Society of Wisconsin to be held in September.

Beginning in a small way some thirty-five years ago, the Abbott Laboratories have steadily risen until now they occupy first place in research and in the production of synthetic medicinals. When we entered the great war, Abbott was assigned the task of producing some of the more important medicinals heretofore made only in Germany, such as Barbital, Procaine and Cinchophen. Soon they added Anesthesin, Acriflavine, Neutral Acriflavine and Neocinchophen. Since then, its chemists and research workers have produced a number of new and valuable products such as Butyn, Butesin and Butesin Picrate, Neonal, Metaphen and Amiodoxyl Benzoate.

The Abbott Laboratories will be glad to welcome you and show you these most interesting and useful products.

During the past few years the research workers of the Abbott Laboratories have developed a number of new and useful products which, after exhaustive clinical investigations, are now ready for the market.

These products will be on exhibit at the convention of the State Medical Society of Wisconsin to be held at Madison in September and include Calsoma, Calcilact, Butyn Eye Ointment, Amiodoxyl Benzoate, Calcium-o-Iodoxy Benzoate, Cinchopyrine, Dysco, Butyn-Ephedrine Solution, Metaphedrin and Taroxide.

Along with these newer items will be exhibited the "tried and true" specialties such as Butyn, Butesin Picrate, Chlorazene, Calcidin, Digipoten, Izal, Neonal, Neonal Compound specialties including Metaphen, Salihexin and Bismarsen.

A staff of Abbott representatives will be in attendance at their booth. They will be pleased to give you any information you may desire on their products. Better drop around.

BURDICK CORPORATION

A very complete line of physical therapy apparatus will attract the up-to-date physician to the Burdick Corporation booth with V. H. Hurley in charge as authorized distributor. There will be on display a complete line of Burdick Lamps including an up-to-the-minute Combination Air and Water-Cooled

Memorial Union Building, Madison, which is to be devoted to the 88th Anniversary Meeting in September.

Quartz Mercury Arc unit. If you have not yet seen the new features incorporated in the Burdick Combination Unit you will be interested in having these features explained to you, especially the Ever-Clear Ever-Cool feature of the Burdick Water-Cooled Lamp. An easily portable Quartz Mercury Arc Lamp, incorporating the same electrical characteristics and having the same clinical possibilities, as the above Air-Cooled Lamp, will also be shown.

You will also be interested in the full line of Zoalite Lamps shown at this booth. There will be other instruments shown at this booth which will interest every physician attending the convention.

Be sure to visit the Burdick booth with Wisconsin made apparatus and with a Wisconsin distributor in charge.

DRYCO

The Dry Milk Company, Inc., 15 Park Row, New York, will exhibit their well-known product DRYCO. DRYCO is a special milk for babies and one of the principal manufacturing plants, which is said to be the finest milk plant in the United States, is located at Columbus, Wis.

The Dry Milk Company, Inc., extends to the physicians who attend this convention an invitation to visit this plant and due notice of time and arrangements for transportation will be given at their booth, No. 2, in the Exhibition Hall. This will, no doubt, interest many physicians and they will not alone have a profitable time in the way of acquiring new knowledge as to dry milk plants, but will have an enjoyable time as well.

HANOVIA

In booth No. 6 the Hanovia Chemical & Mfg. Company of Newark, New Jersey, will exhibit the Alpine Sun and Kromayer Quartz Lamps which are used by more than 150,000 professional men.

This wide acceptance by the medical profession stamps Hanovia equipment as an important influence in the science of light therapy, and in the manufacture of apparatus for that purpose. They were the original Ultra Violet Lamps.

The Sollux Radiant Heat Lamps will also be exhibited, which have unique adaptions to them for producing heat for therapeutic purposes.

A cordial welcome is extended to the members attending, and they hope you will take the opportunity to visit their booth.

HORLICK

The value of Horlick products in the dietetic care of the sick and convalescent will be featured at the Horlick's Malted Milk exhibit. Horlick's Maltose and Dextrin Milk Modifier will also be one of the main topics. Samples of Horlick's the Original Malted Milk, natural and chocolate flavor, and of Horlick's Malted Milk Tablets will be provided for convention visitors in Booth No. 11.

The bar in the Rathskellar.

KELLEY–KOETT

Hospital executives, members of the State Medical Society and visitors to the September meeting will find many new and interesting features of x-ray apparatus on exhibition by the Kelley–Koett Mfg. Company, Covington, Ky. Booth No. 8 will contain many new and interesting pieces of equipment worthy of the attention of all physicians and visitors interested in x-ray and physical therapy work.

The most outstanding product on exhibition will be the new 100–100 x-ray apparatus, the first x-ray generating x-ray apparatus to offer three different and distinct types of installation. Practically any laboratory peculiarity or condition is easily mastered, when one of the three possible 100–100 models are installed.

The Cabinet model has all of the units in one beautifully finished mahogany cabinet. The Wall-Mounted or Built-In model conserves floor space with greater operating convenience and sanitation. The Remote Control model consists of two units, the one a control unit and the other a rectifying unit. It is easily moved and the rectifier may be placed in another room so as to isolate the moving parts.

The apparatus is an ideal x-ray generator for the beginner, or the roentgenologist who wishes to perform fast Radiography, Fluoroscopy and Superficial Therapy. This new generator alone (introduced to the field April 1st, 1929) will make your visit to booth No. 8 worth while.

MEDICAL PROTECTIVE

All members of the State Medical Society of Wisconsin and friends are cordially invited to visit booth No. 4 of the Medical Protective Company. Mr. C. S. Brayton, our Wisconsin general agent, located in Milwaukee, will be delighted to have you call, whether merely to say "hello" and renew old acquaintances or to satisfy yourself on some question of malpractice protection. Consider him at your

service and feel free to call upon him for anything which may contribute to making this the most pleasant and successful society meeting you have ever attended.

MELLIN'S FOOD

No argument is needed to emphasize the advantage to the physician of a thorough knowledge of any product that he deems worthy of frequent or only occasional use in the work of his profession. This is the thought that prompts the Mellin's Food Company to have an exhibit, and the purpose is to give physicians an opportunity to acquire full and complete information relative to the source, nature and amount of food elements present in Mellin's Food, and to discuss the many conditions where Mellin's Food may be used to the advantage of the patient and satisfaction of the medical attendant.

PENGELLY X-RAY

The Pengelly X-Ray Company will exhibit a new motor driven x-ray table manufactured by the Acme International X-Ray Company. Many of the features of this table are new and unique. The table operates from the Trendelenberg to the vertical positions with automatic stops at both extremes. The Bucky Diaphragm and Fluoroscopic mechanism are built in as a single unit and operates completely from one end of the table to the other. The controls for the Fluoroscopic shutter are placed on the Fluoroscopic Screen frame where they can be most easily reached when working in the dark room. The table can be equipped with an Orthodiagraphic attachment of a new design. Many other new features will be seen on this table.

PETROLAGAR

The Petrolagar display embraces a very attractive demonstration of the miscibility of Petrolagar and its advantages over plain mineral oil.

An entirely new issue of drawings (in color) of the large bowel are ready for distribution.

W. B. SAUNDERS

W. B. Saunders Company, Medical Book Publishers, will have on display copies of every book on their list totaling over 300 titles. Among the more important new books and new editions on exhibition will be the new Mayo Clinic Volume, Jackson and Coates Nose, Throat and Ear, Granger's Physical Therapeutic Technic, Babcock's Surgery, Cecil's Medicine, Bethea's Medicine, new 15th edition of the American Illustrated Medical Dictionary, the new edition of Norris and Landis Physical Diagnosis and Diseases of the Chest, Blumer's Bedside Diagnosis, McGuigan's Pharmacology, Pelouze's work on Gonorrhea in the Male, Willius Electrocardiograms, Wechsler's Neurology and Wechsler's Neuroses.

SPENCER LENS

Our company will make a more complete display of our products than in former years. We will not only show our latest models of microscopes for physicians hospitals and laboratories, together with all necessary accessories, but we will also show a complete line of Microtomes. In addition to this certain projection equipment will be shown together with filmslides on "Health" and "Hygiene". Included in the display will be several new Microscopes, entirely new Microtomes and most unique Projectors. Our display should appeal not only to the medical worker, but also to the general educator.

E. R. SQUIBB

Booth No. 14, at the State Medical Society of Wisconsin exhibit, will be devoted to a particularly complete display of the Biological Products and Specialties of the House of Squibb. Questions arising concerning the nature and use of these products will be answered by Squibb representatives.

Among the newer products on exhibit will be Vitavose—The New Maltose-Dextrin which is exceedingly rich in Vitamin B. Physicians interested in endocrine therapy should not miss the display of Amniotin—the new physiologically tested ovarian hormone preparation. Other new Squibb specialties will also be shown, and a competent staff of representatives will be present to answer inquiries about these new, and other, Squibb products.

VICTOR X-RAY

One of the most interesting pieces of equipment that we expect to exhibit is the new Victor Portable Electrocardiograph. This Electrocardiograph is quite different from anything that has ever been offered to the medical profession. It is a machine that was brought out by our Experimental Department and Research Laboratory of the General Electric Company at Schenectady. If it were not for the radio we would not have the perfect Electrocardiograph that we are making today. Inasmuch as the heart murmurs are amplified over six thousand times with radio tubes it enables us to make tracings of the heart without interference, and it also does away with the possibility of breaking the quartz string that was formerly a great hazard with this type of equipment. Instead of using a quartz string in our galvanometer we use a phosphorus bronze ribbon that is dampened in oil. With this new instrument it is possible to teach the operator to make tracings of the heart in a very few minutes, where one had to have months of experience with the older types. We also expect to exhibit our usual line of X-Ray and Physical Therapy Apparatus.

Officers and Committees Submit Reports and Recommendations to September Annual Meeting

REPORT OF CHAIRMAN OF THE COUNCIL

To The 1929 House of Delegates:

During the year your Council has held three meetings at which most important questions of policy of the Society have been discussed and appropriate actions taken. To the end that the House may have recommendations of the Council before it in such form as action may be taken thereon, the recommendations are summarized following:

Financial Situation. A special committee of your Society spent much time in studying the general financial condition of the Society with the view of determining the future activities of the Society. This committee, composed of the Chairman of the Council, Dr. M. D. Bird of Marinette, Dr. F. J. Gaenslen of Milwaukee, Dr. Rock Sleyster of Wauwatosa, Dr. H. P. Greeley of Madison and the President submitted to the Council three suggestions which have been approved by the Council and which recommendations are now properly before this House for action.

1. Dues. The committee and Council finds that the employment of the full-time secretary has been a distinct economy and the savings he has been able to effect for the Society, notably through publication of the Journal, have in the past, and do now, exceed the salary paid him.

We find that as the Society has extended its services to the members, the cost of the office has naturally increased and that further increases may be anticipated for the future inasmuch as practically all of the services to the members are handled by the Secretary or through his office.

We further find that the present general efforts of the Society such as the press service, the presentation of Hygeia, the appropriation to the committee on public policy, the secretaries' conference, the Blue Book, and other minor appropriations are not excessive nor can they well be cut if the Society is to continue to do the work that appears to be the desires of the members. This means that the present budget of $22,000 has required the utmost consideration to make it cover those activities mentioned. While other states may reasonably expect an increase in membership, and thus an annual increase in budget, Wisconsin now leads all other states in the percentage of physicians in the state that are members (about 78%) which would seem to indicate that no considerable growth may be expected if present standards of membership are to be maintained.

With this brief background in mind, your committee and Council find that there are still other projects in which this Society should play an active part if it is to accomplish for its members and the public that which is desirable. Briefly, these include the development of the Auxiliary, a series of annual conferences with all those interested in public health movements to the end that these separate organizations may have our reactions and suggestions, the continuation of the Blue Book for which funds will be materially limited beginning with 1930, some expansion for the annual secretaries' conference, establishment of the speakers' bureau for lay public health talks, some expansion of the lay educational efforts of the Society, probable addition to the office staff of a stenographer, and the suggestion of the retiring President that an appropriation be granted for a medical editor for the scientific section of our Wisconsin Medical Journal.

In view of the further fact that in the past six years this Society has definitely saved every member his dues in perpetuity, even had the dues been $25 a year, through repeal of existing state laws and prevention of other proposed legislation, your committee and Council are unanimously of the opinion that the dues of the State Society should be raised to $15 beginning with 1930. For the information of the House the dues of Minnesota are now $15 while other states with dues of that figure or more include Idaho—$40; Washington—$40; District of Columbia—$20; Oregon—$20; Maryland—$18, while several states with present dues of $10 are, according to information received, anticipating a raise similar to that suggested in this report. While it is true that some states have lower dues, it must be remembered that in many of these the membership is much larger so that the total amount available still exceeds by far that which will be available in this state even under the increase. An example of this is Michigan where with state dues of $10 a year and 3,500 members the annual income is $35,000.

We look upon dues as both insurance on our individual investments of upwards of $20,000, and as an investment. We feel that the increase proposed can be amply justified on either ground and certainly on both combined.

2. Two years ago there was established the Endowment Fund of the Society. This fund, distinct and separate from the current funds of the Society, was founded with the thought that its income in the future years might well be used for special purposes and needs of the profession as designated by the grantors or as determined by the Council. While it is understood that bequests to this fund are in the amount of $200,000 which will be received upon the death of the grantors, it has seemed desirable to your committee and the Council that the development of this fund be given a greater impetus at this time. Accordingly, two suggestions are made, the first of which is that this House empower the treasurer of the Society to presently receive gifts from the members for this fund and that during the lifetime of the grantor the Treasurer be empowered and authorized to pay an annual interest upon such gifts at the rate of five

per cent. This guarantees the grantor a fair return upon this money during his lifetime and will, it is believed, go far toward the building of this separate fund. Interest payments will, of course, cease upon the death of the member. Under no conditions is the principal of any such gifts to be used during the lifetime of the grantor.

3. As a further stimulus to the fund, it is our joint suggestion that the Constitution be amended to provide that upon the receipt of $1,000 as an outright gift to the Endowment Fund, the member shall become a life member of the State Medical Society of Wisconsin without the requirement of annual dues, assuming that the member continues in good standing with his county medical society. Accordingly, we present at this time the following amendment to the Constitution which, under the Constitution, must be presented at this meeting and then lie on the table one year before action is taken thereon: Amend Article IV of the Constitution by adding a section to read: "Section 3. Members in good standing who shall make outright gifts to the Endowment Fund of this Society in the amount of $1,000 or more shall have bestowed upon them the gift of life membership in this Society. Such membership shall carry with it all the prerequisites of active membership, without the requirements of annual dues, and shall continue in force during the life of the member; provided that the member continues in good standing in his local county medical society."

Conclusion

Your Council has authorized a formal audit of the accounts of the Treasurer and those of the Secretary-Managing Editor. These audits will be found in the current issue of the Wisconsin Medical Journal and indicate that the respective officers have faithfully discharged their duties in this respect. These audits will be made annually hereafter as a matter of form, the larger receipts and disbursements of the Society justifying such procedure.

Respectfully submitted,

Arthur W. Rogers,
Chairman of the Council.

REPORT OF THE SECRETARY

To The 1929 House of Delegates:

Since 1922 there has been a consistent and steady gain in the membership of the Society. On July 15, 1929 there were 2105 members as compared to 2043 on August 1, 1928. Inasmuch as the total membership for 1928 was but 2145, an increase seems apparent for the current year.

SCIENTIFIC WORK

State medical societies exist primarily to elevate the standards of scientific medicine as practiced by every member. This is at once the oldest purpose for medical organization and the foremost today, if state societies are to fulfill the conception of their founders. Your Secretary is impressed with the belief that as this end is emphasized and attained so will many seemingly separate and distinct problems fade into obscurity.

The year has seen a splendid growth in the use of the packet library service under the Extension Division until today it fills over 100 requests a week. It is anticipated that this service will increase in size, and in value, as the members more generally become acquainted with its possibilities. With one exception, this work is unique among the states and members availing themselves of the material have repeatedly expressed gratification on the complete and rapid service presented in this manner.

Again through the joint committee on medical extension, a large number of lectures have been made available to every county medical society in the state as a background for the building of interesting and instructive programs without prohibitive costs. An increasing number of these presentations were made during the past year. Extension courses have also met with an excellent response.

It has been the joint aim of the committee on scientific work, the editorial board and your Secretary to build Wisconsin medicine and to that end each issue of the Journal and each program finds a still larger representation from our own membership.

SERVICES TO THE MEMBER

While the legislative efforts of the Society have necessarily required the constant attention of your Secretary during the past year, the Society has accomplished much for the individual member in other fields. The prevention of malpractice cases, a study of collections and collection methods, newer surveys and distribution of information on laws that affect all in their daily practice, a more comprehensive Medical Blue Book, the furthering of lay education and many more like subjects have been given close attention for the benefit of the membership. A large amount of personal mail has been welcomed, for time and again the needs and desires of a single member as expressed in a letter have pointed the way for a service applicable to all. For half the year a third assistant was found essential and the time is probably at hand when such services will be required permanently.

The Journal has made a continued progress and while the financial report appended is for the calendar year of 1928, it has continued as self supporting during the first six months of the current year. This is the only state journal on such a basis.

THE ORGANIZATION

To the mind of your Secretary this year definitely closes what may be termed a period of corrective effort on the part of your State Society. For the past six and a half years, in the field of service to the membership, your organization has succeeded in correcting or securing the correction of one injustice after another, each one of which affected practically

every member in obvious ways. The period closes this year with the repeal of the state permit and its annual $10 fee. In such a time it is comparatively easy to secure most active cooperation of the general membership for each has been able to see concrete advantages.

Your Society now stands on the threshold of a new period in its efforts for the benefit of its members

Delegates and Alternates who will Compose House of Delegates for Eighty-Eighth Anniversary Meeting at Madison

Society	Delegate	Alternate
Ashland-B-I	C. J. Smiles, Ashland	M. L. Young, Ashland
Barron-P-W-S-B	D. L. Dawson, Rice Lake	I. G. Babcock, Cumberland
Brown-Kewaunee	R. L. Cowles, Green Bay	W. M. Wochos, Kewaunee
Calumet	J. W. Goggins, Chilton	J. J. Minahan, Chilton
Chippewa	A. J. Somers, Chippewa Falls	
Clark	E. L. Bradbury, Neillsville	R. R. Rath, Granton
Columbia	A. F. Schmeling, Columbus	H. E. Gillette, Pardeeville
Crawford	A. J. McDowell, Soldiers Grove	T. E. Farrell, Seneca
Dane	James P. Dean, Madison	W. T. Lindsay, Madison
	A. S. Thompson, Mt. Horeb	G. E. Bilstad, Cambridge
Dodge	A. E. Bachhuber, Sr., Mayville	A. A. Hoyer, Beaver Dam
Door		
Douglas	T. J. O'Leary, Superior	
Eau Claire and Associated	F. C. Kinsman, Eau Claire	R. E. Mitchell, Eau Claire
	J. A. Halgren, Menomonie	O. J. Blosmo, Menomonie.
Fond du Lac	S. E. Gavin, Fond du Lac	H. R. Sharpe, Fond du Lac
Grant	J. C. Betz, Boscobel	Elgie Kraut, Lancaster
Green	J. F. Mauermann, Monroe	W. G. Bear, Monroe
Green Lake-W-A	A. J. Wiesender, Berlin	G. E. Baldwin, Green Lake
Iowa		
Jefferson	H. O. Caswell, Ft. Atkinson	H. P. Bowen, Watertown
Juneau	C. C. Vogel, Elroy	
Kenosha		
La Crosse	G. Gundersen, La Crosse	W. J. Jones, La Crosse
Lafayette		
Langlade	J. C. Wright, Antigo	J. W. Lambert, Antigo
Lincoln	W. H. Bayer, Merrill	E. O. Ravn, Merrill
Manitowoc	L. J. Moriarty, Two Rivers	F. E. Turgasen, Manitowoc
Marathon	H. H. Christensen, Wausau	S. M. B. Smith, Wausau
Marinette-Florence	G. R. Duer, Marinette	J. V. May, Marinette
Milwaukee	W. M. Kearns, 230 Wisconsin Ave.	S. M. Mollinger, 396-11th Ave.
	M. G. Peterman, 167-17th St.	A. B. Schwartz, 418 E. North Ave.
	E. F. Peterson, Wauwatosa	S. G. Higgins, Wells Bldg.
	B. Krueger, Cudahy	A. A. Pleyte, 558 Jefferson St.
	F. A. Thompson, 425 E. Water St.	R. J. Dalton, Wells Bldg.
	D. E. W. Wenstrand, 210 E. Wis. Ave.	Edith McCann, Goldsmith Bldg.
	J. Dieterle, Goldsmith Bldg.	C. J. Coffey, Majestic Bldg.
	E. W. Miller, 217 Michigan St.	W. Joseph, 366 Greenfield Ave.
	S. J. Seeger, Wells Bldg.	Oscar Lotz, Wells Bldg.
	T. Willett, 625-72nd Ave., West Allis	H. C. Schumm, Goldsmith Bldg.
	H. J. Gramling, 1321 Forest Home Ave.	G. W. Neilson, 776-3rd St.
	H. W. Powers, 123 Wisconsin Ave.	F. D. Murphy, 530 Wis. Ave.
Monroe	S. D. Beebe, Sparta	T. J. Sheehy, Tomah
Oconto	C. J. Ouellette, Oconto	E. A. Linger, Oconto
Oneida-F-V		
Outagamie	V. F. Marshall, Appleton	J. B. MacLaren, Appleton
Pierce-St. Croix	J. W. Prentice, Amery	Rolla Cairns, River Falls
Portage	Erich Wisiol, Stevens Point	F. R. Krembs, Stevens Point
Price-Taylor	F. W. Mitchell, Ogema	G. E. MacKinnon, Prentice
Racine	H. B. Keland, Racine	L. E. Fazen, Racine
Richland	H. C. McCarthy, Richland Center	J. S. Booher, Richland Center
Rock	W. J. Allen, Beloit	H. O. Delaney, Beloit
	W. H. McGuire, Janesville	P. A. Fox, Beloit
Rusk	W. F. O'Connor, Ladysmith	J. C. Baker, Hawkins
Sauk	H. J. Irwin, Baraboo	F. E. Tryon, Baraboo
Shawano	A. J. Gates, Tigerton	E. E. Evenson, Wittenberg
Sheboygan	Otho Fiedler, Sheboygan	C. J. Weber, Sheboygan
Trempealeau-J-B	C. F. Peterson, Independence	H. A. Jegi, Galesville
Vernon	Wm. M. Trowbridge, Viroqua	W. H. Remer, Chaseburg
Walworth	Edward Fucik, Williams Bay	M. V. DeWire, Sharon
Washington-Ozaukee	H. M. Lynch, Allenton	C. A. Balkwill, Grafton
Waukesha	M. R. Wilkinson, Oconomowoc	H. T. Barnes, Delafield
Waupaca	F. E. Chandler, Waupaca	T. E. Loope, Iola
Winnebago	J. W. Lockhart, Oshkosh	W. P. Wheeler, Oshkosh
Wood	F. X. Pomainville, Wisconsin Rapids	K. H. Doege, Marshfield

and of those whom they serve. No longer will it be able to say to members that through the repeal of such a law we have saved each $10 or $25 a year. But in its place the Society now has the opportunity to do an even greater work in a directive field.

This work will be broader in scope, and its results, as success is attained, will be even more beneficial to the members and the public but will be far less demonstrable in any concrete manner. The entering of this period, is to the mind of your Secretary, the test of the strength of each component society and the State Society as a whole.

In 1871 the President of this Society declared in his address that the medical profession was then in a period of transition. What was true then is even more true today. The problems of the individual physician and his future have become very largely the problems of the profession as a whole. The larger aims of each physician are now the aims of all physicians and their attainment may only be secured by the group who can accomplish for all that which cannot longer be accomplished by each for himself. All appreciate that there are no dividends from jealousies and bickerings; no dividends without investments; no achievements except by the combined efforts of all to whom benefits must ultimately flow.

The great advances of science have awakened a new social consciousness in the non-medical public. The public is beginning to realize that some of the tremendous burden of sickness need not be met if preventive means are adopted that are already known. With this realization has come the natural desire on the part of laymen to accomplish immediate results. I need not tell you that immediate results are sometimes costly things. It is indeed an easy matter to look and work so hard for immediate results that the cost for the future, that lies just around the corner, may never be seen and much less estimated.

The ends desired by laymen and by physicians are not divergent. But the means of securing that which all desire may readily become divergent, and the results disastrous, unless the desire of the public be teamed with the wise directive force and the intelligent leadership of the organized medical profession. Here lies the great field for endeavor of your State Society. Accomplishments in this new field will require a still more compact organization and a realization on the part of every member that only through the closest cooperation are the immediate problems of the profession, as well as those that room on the horizon, to be met and solved in any satisfactory method.

As a concrete illustration I call attention to the bill pending in this legislative session providing for a 200 bed hospital at Madison for the care of indigent orthopedic cases. In the first place it is obvious to the profession that the appropriation of $500,000 will not build a 200 bed hospital for this work. In the second place it is at least doubtful whether it could be maintained, as suggested by the proponents, at a bed rate of between $2 and $3 a day. Third, in Ohio instead of centralizing all such care, the authorities select hospitals and capable surgeons throughout the state which act as clearing centers for this type of work. That which may be done at the local point is referred to such appointed surgeons. That which requires the services of the more skilled is referred to the central institution. It has been said that not only is the Ohio plan more desirable because of its decentralization but that it is far less expensive to the state and more desirable from the public standpoint.

Your Secretary is not in position at this time to say which plan is best but inasmuch as the present bill will probably fail for lack of free funds, he cites this as a case in point where careful work by the State Society might well produce results helpful to the public and to physicians themselves. Like instances in other fields will suggest themselves to each member.

IN APPRECIATION

The accomplishments of the year could not have been secured had it not been for the splendid cooperation of the several committees, the Council and of the general membership. Despite the fact that the increasing work of the Society makes it harder to find the time to visit county and district meetings, the members are following the work of the Society closely, and the telephone, the telegram and the letter has found them ready to give a splendid help. It has been the fact that this aid has been given in every county that has made the greater portion of our success possible. Your Secretary takes this opportunity to express to the officers and members his very sincere appreciation of their aid that has made both the aims of the year possible of attainment, and his own work a distinct pleasure.

Respectfully submitted,

George Crownhart, Secretary.

SECRETARY'S AUDIT

Mac Gowan & Taylor
Auditors and Public Accountants
Madison, Wisconsin

July 18, 1929

To the Board of Councilors of the State Medical Society of Wisconsin and the Editorial Board of the Wisconsin Medical Journal

Dear Sirs:

In compliance with the request of Mr. J. George Crownhart, Secretary and Managing Editor, of your respective bodies, we have made a cash audit of the financial records supervised by Mr. Crownhart and submit herewith statements of receipts and disbursements of the two organizations which, in our opinion, presents a correct accounting of all moneys entrusted to Mr. Crownhart during the year under examination.

We verified the cash in the bank, of each organization, by direct correspondence with the deposi-

tory, and ascertained that all receipts recorded on the books of the respective organizations were properly deposited in the corresponding bank account.

Examining the disbursements of the Wisconsin Medical Journal, we found invoices or vouchers supporting all major disbursements with the exception of salary and other sundry items.

The disbursements of the State Medical Society of Wisconsin are not authorized by vouchers or invoices; the principal disbursements being remittances by the Secretary to Dr. Rock Sleyster, Treasurer of the Society. The checks issued by the Secretary during the year were all examined and found to be in agreement with the book records.

Respectfully submitted,

Mac Gowan & Taylor,
Auditors and Public Accountants.

Exhibit A

Wisconsin Medical Journal
Madison, Wisconsin

A Statement of Receipts and Disbursements for the year ending December 31, 1928

Cash in Bank, January 1, 1928		$2,704.93
Receipts		
Advertising	$9,858.01	
Subscriptions	68.73	
Miscellaneous	15.50	
Total Receipts		9,942.24
Total Cash to be accounted for		$12,647.17
Disbursements		
Salaries	$2,321.44	
Printing	6,460.91	
Mailing	328.95	
Cuts	162.14	
Rent	395.00	
Miscellaneous	129.19	
Supplies	8.00	
Subscriptions	54.35	
Postage	150.00	
Cash payments charged to personal accounts	184.99	
Total Disbursements		10,194.97
Cash in Bank, December 31, 1928		$2,452.20

Schedule A—1

Wisconsin Medical Journal
Madison, Wisconsin

Verification of Bank Balance

Balance, December 31, 1928, as certified by the Commercial National Bank	$2,452.20
Less: Checks Outstanding	none
Balance, December 31, 1928, as above	$2,452.20

Exhibit B

The State Medical Society of Wisconsin
Madison, Wisconsin

A Statement of Receipts and Disbursements for the year ending December 31, 1928

Cash in Bank, January 1, 1928			$978.00
Receipts			
Dues—Regular	$21,329.75		
Dues — Medical Defense	2,760.00		
Total 1928 Dues		$24,089.75	
Advance Dues 1929		3,165.00	
State Medical Society of Wisconsin		100.00	
Health Blanks		1.14	
Wisconsin Medical Journal		2.00	
Total Receipts			27,357.89
Total Cash to be accounted for			$28,335.89
Disbursements			
Remittances to Dr. Rock Sleyster—1928 Dues		$24,089.75	
Remittances to Dr. Rock Sleyster—1929 Advance Dues		580.00	
Refunds to local secretaries		31.00	
Miscellaneous		1.14	
Total Disbursements			24,701.89
Cash in Bank, December 31, 1928			$3,634.00

Schedule C

The State Medical Society of Wisconsin
Madison, Wisconsin

Reconciliation of Bank Account as of December 31, 1928

Balance, January 1, 1928 per bank statement		$1,050.55
Less: Checks Outstanding		
#58 Dr. L. L. McCoy	$4.00	
#160 Dr. W. M. Jermain	2.00	
#243 Dr. Martin Johnson	1.00	
#244 Dr. Rock Sleyster	65.55	72.55
Balance, January 1, 1928, subject to withdrawal		$978.00
Deposits for the year		27,357.89
Total Cash to be accounted for		$28,335.89
Disbursements by checks for the year		24,701.89
Balance, December 31, 1928, subject to withdrawal		$3,634.00

Verification of Bank Balance

Balance, December 31, 1928, as certified by Commercial National Bank		$3,652.00
Less: Checks Outstanding		
#58 Dr. L. L. McCoy	$4.00	
#160 Dr. W. M. Jermain	2.00	
#3 Dr. Rock Sleyster	12.00	18.00
Balance December 31, 1928, as above		$3,634.00

MEMBERSHIP REPORT

July 15, 1929

County Society	Last Year Dec. 31, 1928	This Year July 15, 1929	Loss— Gain+	Delinquent	Deceased	Removed	New Members	Honorary
1st District								
Dodge	28	25	—3	1	1	1		1
Jefferson	31	30	—1	1	--	--	--	--
Waukesha	48	49	+1	2	--	--	3	1
Totals	107	104	—3	4	1	1	3	1
2nd District—								
Kenosha	42	42	--	3	--	--	3	--
Racine	51	52	+1	1	--	1	3	--
Walworth	30	26	—4	3	--	1	--	1
Totals	123	120	—3	7	--	2	6	1
3rd District—								
Dane	151	153	+2	5	4	--	11	4
Columbia	31	33	+2	--	--	1	3	--
Green	17	17	--	--	--	--	--	--
Rock	83	83	--	--	--	1	1	1
Sauk	23	19	—4	4	1	--	1	--
Totals	305	305	--	9	5	2	16	5
4th District—								
Crawford	10	10	--	--	--	1	1	--
Grant	32	32	--	1	--	--	1	--
Iowa	12	12	--	--	--	--	--	--
LaFayette	16	14	—2	1	--	1	--	--
Richland	14	14	--	--	1	--	1	--
Totals	84	82	—2	2	1	2	3	--
5th District—								
Calumet	13	14	+1	--	--	--	1	--
Manitowoc	35	34	—1	--	2	--	1	1
Washington-O.	25	24	—1	1	--	--	--	--
Sheboygan	50	47	—3	2	--	1	--	--
Totals	123	119	—4	3	2	1	2	1
6th District—								
Brown-Kew.	61	58	—3	5	1	--	3	1
Door	6	3	—3	3	--	--	--	--
Outagamie	45	45	--	--	1	2	3	--
Fond du Lac	42	46	+4	--	--	--	4	--
Winnebago	58	59	+1	3	--	1	5	--
Totals	212	211	—1	11	2	3	15	1
7th District—								
Juneau	7	6	—1	--	--	1	--	--
La Crosse	52	55	+3	--	--	--	3	1
Monroe	21	20	—1	1	--	--	--	--
Tremp.-J-B.	22	21	—1	1	--	1	1	--
Vernon	13	12	—1	2	--	--	1	--
Totals	115	114	—1	4	--	2	5	1
8th District—								
Marinette-Fl.	19	19	--	--	--	--	--	--
Oconto	10	12	+2	--	--	--	2	--
Shawano	14	11	—3	2	--	1	--	--
Totals	43	42	—1	2	--	1	2	--
9th District—								
Clark	16	16	--	--	--	1	1	--
Gr. Lake-W-A.	16	15	—1	1	1	--	1	1
Lincoln	14	13	—1	1	--	--	--	--
Marathon	40	41	+1	--	1	--	2	--
Portage	22	21	—1	--	1	1	1	--
Waupaca	22	20	—2	2	--	--	--	1
Wood	24	28	+4	--	--	--	4	--
Totals	154	154	--	4	3	2	9	2
10th District—								
Bar.-P-W-S-B	42	41	—1	1	1	1	2	--
Chippewa	25	24	—1	--	1	--	--	--
Eau Claire & A.	56	59	+3	1	1	--	5	--
Pierce-St.Croix	31	32	+1	--	--	--	1	2
Rusk	7	5	—2	1	--	1	--	--
Totals	161	161	--	3	3	2	8	2
11th District—								
Ashland-B-I.	22	17	—5	4	3	--	2	--
Douglas	40	38	—2	1	--	1	--	--
Langlade	13	15	+2	--	--	--	2	--
Oneida-F-V.	15	12	—3	2	1	--	--	--
Price-Taylor	14	12	—2	3	--	--	1	--
Totals	104	94	—10	10	4	1	5	--
12th District—								
Milwaukee	614	599	—15	33	4	6	28	--
Gr. Total	2145	2105	—40	92	25	25	102	14

TREASURER'S AUDIT

Pace, Gore & McLaren
Accountants and Auditors
Milwaukee, Wisconsin, January 31, 1929.

To the
Board of Councilors,
The State Medical Society of Wisconsin,
Madison, Wisconsin.

Dear Sirs:

In accordance with your direction, we have audited the financial records of

DR. ROCK SLEYSTER, TREASURER
THE STATE MEDICAL SOCIETY OF
WISCONSIN

for the year ended December 31, 1928, and in our opinion the appended statement of cash receipts and disbursements presents a correct accounting of the Society's funds entrusted to Dr. Sleyster's care.

We verified cash in the bank by direct communication with the depository, and traced all receipts recorded on the books during the year into the bank. We also made a test-check of remittance advices of your secretary and found these properly accounted for on the treasurer's books. A test-check of the disbursements showed same to have been duly approved by the secretary.

The investment securities as listed in exhibit B were presented for our inspection.

Yours faithfully,

PACE GORE & MCLAREN.

DR. ROCK SLEYSTER, TREASURER
THE STATE MEDICAL SOCIETY OF WISCONSIN

Statement of Cash Receipts and Disbursements
For the year ended December 31, 1928

	General Fund	Medical Defense Fund	Total
Cash in bank Jan. 1, 1928	$ 850.12	1,384.93	2,235.05
RECEIPTS:			
Remittances from secretary—dues and exhibit rentals	$25,077.52	$2,766 00	$27,843 52
Income from investment securities (exhibit B)	840 00		840 00
Total Receipts	$25,917.52	2,766 00	28,683 52
Total cash to be accounted for	$26,767 64	4,150 93	30,918.57
DISBURSEMENTS:			
Salary—secretary	$5,700 00		5,700.00
Salaries—office	3,090 00		3,090 00
Medical defense fund		1,492 35	1,492 35
Miscellaneous expense	16,679 95		16,679.95
Total disbursements	$25,469.95	1,492 35	26,962.30
	$1,297 69	2,658 58	
Cash in bank Dec. 31, 1928			$3,956.27

DR. ROCK SLEYSTER, TREASURER
THE STATE MEDICAL SOCIETY OF WISCONSIN

Investment Securities
December 31, 1928

	Interest Rate	Number	Due Date	Par Value	Interest received in 1928
First Wisconsin National Bank—certificates of deposit	3%	67445	(1) Aug. 15, 1927	$2,000 00	
Wisconsin Public Service Company—first mortgage and refunding gold bonds—series A	5	770	Jan. 1, 1942	1,000 00	50 00
Wisconsin Public Service Company—first mortgage and refunding gold bonds—series A	5	1777	Jan. 1, 1942	1,000 00	50 00
Wisconsin Public Service Company—first mortgage and refunding gold bonds—series A	5	2198	Jan. 1, 1942	1,000 00	50 00
Wisconsin Traction, Light, Heat & Power Co.—first mortgage	5	276	Jan. 1, 1931	1,000 00	50 00
Wisconsin Traction, Light, Heat & Power Co.—first mortgage	5	754	Jan. 1, 1931	1,000 00	50 00
Wisconsin Traction, Light, Heat & Power Co.—first mortgage	5	2737	Jan. 1, 1931	1,000 00	50 00
The Milwaukee Electric Railway & Light Co.—refunding and external mortgage gold bonds	4½	2007	Jan. 1, 1931	1,000 00	45 00
The Milwaukee Electric Railway & Light Co.—refunding and external mortgage gold bonds	4½	2008	Jan. 1, 1931	1,000 00	45.00
The Milwaukee Electric Railway & Light Co.—refunding and external mortgage gold bonds	4½	3337	Jan. 1, 1931	1,000 00	45 00
The Milwaukee Electric Railway & Light Co.—refunding and external mortgage gold bonds	4½	6519	Jan. 1, 1931	1,000 00	45.00
Northern States Power Company—first and refunding mortgage gold bonds—series A	5	D471	April 1, 1941	500 00	25.00
Northern States Power Company—first and refunding mortgage gold bonds—series A	5	D707	April 1, 1941	500 00	25 00
Northern States Power Company—first and refunding mortgage gold bonds—series A	5	D1252	April 1, 1941	500.00	25 00
Northern States Power Company—first and refunding mortgage gold bonds—series A	5	D1253	April 1, 1941	500 00	25 00
Northern States Power Company—first and refunding mortgage gold bonds—series A	5	D1372	April 1, 1941	500 00	25 00
Northern States Power Company—first and refunding mortgage gold bonds—series A	5	D1427	April 1, 1941	500 00	25 00
Northern States Power Company—first and refunding mortgage gold bonds—series A	5	D1534	April 1, 1941	500 00	25 00
Northern States Power Company—first and refunding mortgage gold bonds—series A	5	D1651	April 1, 1941	500 00	25.00
American Telephone and Telegraph Co. conv. gold bonds	4	101541	Sept. 1, 1936	1,000 00	40.00
American Telephone and Telegraph Co. conv. gold bonds	4	101542	Sept. 1, 1936	1,000.00	40.00
American Telepbone and Telegraph Co. conv. gold bonds	4	101544	Sept. 1, 1936	1,000 00	40 00
American Telephone and Telegraph Co. conv. gold bonds	4	101545	Sept. 1, 1936	1,000 00	40 00
				$20,000.00	$840 00

(1) Date of issue

COMMITTEE ON PUBLIC POLICY

To the 1929 House of Delegates:

Because this report is written prior to the end of the legislative session, the committee may find it essential to make a further report on the floor of the House.

1. Proposals of the Society. Pursuant to authority of the 1928 House of Delegates your Committee suggested the following measures at this legislative session:

a. Abolish the itinerant license for the practice of medicine. Defeated.

b. Raise the presently inadequate fees for the examination of those alleged to be insane. Defeated.

c. Reorganize the composition of the state board of medical examiners. This was held pending and not introduced.

d. Repeal of the state fee of $10 a year under the State Prohibition Act. This was accomplished.

e. Secure an appropriation of $5,000 a year to the State Board of Medical Examiners to permit them to employ a full time investigator to weed out major forms of quackery in this state. This was accomplished.

f. Secure a needed change in the charter law of the State Medical Society. This was accomplished.

g. Amend the law to permit the Society to establish an endowment fund. This was accomplished.

h. Maintain, without amendment, the present form of the law pertaining to privileged testimony of physicians. Despite opposition from the circuit judges of the state this was accomplished.

On this record alone your Committee takes particular pride but the work in the field of legislation was far more extensive than just proposals of the Society. In addition some fifty measures from as many separate sources were closely examined and those in the public interest supported while those not in the public interest were opposed. No measure opposed by the Society received the approval of either house of the legislature. Among those opposed was one proposing authority to chiropodists to extend their work to the field of surgery except amputations. We do not feel it essential here to repeat the many arguments against this measure from the public standpoint but only mention the bill as one typical of the type of bills opposed.

Among those measures passed which received approval of the Society was that establishing county health departments.

Your committee is convinced, after reviewing legislative efforts elsewhere, that the present policies of this Society are the only ground for continued success. We do not propose to "lobby" in the generally accepted use of that term. We do propose that each member shall know the viewpoint of the profession, and of the scientific knowledge that prompts such views, on all measures affecting the public health or the profession. In that effort we have had the very hearty cooperation of individual members throughout the state and without such aid, this report could not have been written.

While we cannot single out any one person, for all made contributions, we would be neglectful did we mention the help received from the following members who were called upon repeatedly throughout the session: Drs. G. E. Moore of Antigo; A. T. Shearer of Edgerton; G. H. Irwin of Lodi; R. B. Arveson of Frederic; G. E. Whalen of Milwaukee; H. D. Ludden of Mineral Point; W. H. Zwickey of Superior; A. J. McDowell of Soldiers Grove; R. C. Buerki and Arthur Sullivan of Madison; J. H. Karsten of Horicon; David Mehigan of Milwaukee; C. D. Boyd of Kaukauna; Curtis A. Evans of Milwaukee; Joseph F. Smith of Wausau; Wilson Cunningham of Platteville; M. A. Bailey of Fennimore; E. L. Bradbury of Neillsville; A. R. Bellerue of Iola; P. P. M. Jorgenson of Kenosha; H. M. Stang of Eau Claire; John F. Schneider of Oshkosh; and J. Gurney Taylor of Milwaukee.

In conclusion we would call the attention of the members to the fact that in the passage of the bill appropriating monies from the general fund of the state to eliminate gross cases of quackery in the state, Wisconsin has established a proper principle for the enforcement of acts governing treating of the sick. Elsewhere physicians have submitted to a reregistration fee of from $1 to $5 a year and this money has then been used to prosecute quacks. As pointed out by this committee three years ago, acts governing treating the sick are the basic public health laws of the state and their enforcement should be the concern of the localities and of the state. This principle is now established in Wisconsin while in neighboring states physican are paying $5 a year for similar efforts.

In conclusion we wish to acknowledge that the success which has been attained has been due almost entirely to the very efficient work of the Secretary. There is no doubt that his permanent residence in Madison has been a very material factor in the success of this work which, we judge, must have occupied the greater portion of his time and energies for the last seven months.

Respectfully submitted for the Committee,

Otho Fiedler, Chairman.

COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

To The 1929 House of Delegates:

During the year your committee has continued two projects approved by the Society in the field of lay educational effort. First, we have again presented annual subscriptions to Hygeia to every member of the legislature, state officers who have to do with health questions, prominent laymen, and to the state normal school libraries. With each presentation there was sent a personal letter from the Society explaining the reason for the gift. In response to these 450 presentations, nearly an equal number of letters of appreciation were received. Your committee is convinced that this expenditure goes far to accomplish a valuable piece of educa-

tional work among that number that have to do with what would otherwise be very technical questions and provides the recipients with a general basic information that enables them to judge of the value of future recommendations of this Society. We therefore recommend that this work be continued, and, if funds are available, that Hygeia be presented to the libraries of each county normal school in the state.

2. Three hundred and seventy-five daily and weekly newspapers of this state are now receiv the weekly news story issued under the auspices of this committee of your Society. The clippings of this story in type from any one week makes a newspaper column over 150 feet in length.

While not every story deals with a major health problem, all are aimed to acquaint the people of the state with the services that are to be had at the hands of the family physician in the prevention and cure of disease. Each story is designed to give valuable information with which the non-medical public would not be acquainted in any other manner. It is hard to estimate the numbers of readers but it is apparent that they number hundreds of thousands each week.

While no address of the Society is given for questions or literature because the funds do not permit of this work, nevertheless the Society receives countless letters from readers asking for additional information and literature.

It will interest the members to know that this service is so well considered in other states that it has already been sold to Minnesota, for a very nominal sum and its extension to several other states seems possible.

We recommend the continuance of this public service and its extension for magazines in the state should additional funds become available.

Respectfully submitted for the committee,

H. M. Stang, *Chairman.*

COMMITTEE ON MEDICAL DEFENSE

In rendering this year's report your Defense Committee has reason to harbor a sense of comfort in the work accomplished. Last year we reported a total of 190 cases that had come to our notice in a service of twenty years' standing. The year has added but ten to this number so that our records now represent a total of 200 individual members who have been aided in one way or another; either by suit or the non-suiting of cases; by the withdrawal of suits; or by dismissal of claim or charge when it was learned that the State Society was prepared to back up its members, or it was proven that no valid cause for action existed.

Our failures were so few in these past 200 cases that we may speak of our results as an almost unparalleled succession of victories. What this means to many doctors in their own communities, no one is as well able to judge as they themselves. We do know, however, that a physician's prestige is often subject to the caprice of his community, and that his position therein is frequently judged favorably or unfavorably by the outcome of a court proceeding —should he be unfortunate enough to become involved in such.

The death of Mr. Willett Spooner, who had given us such meritorious service since the defense was organized, was felt as a keen loss. As successor to him the Council has selected Mr. Ralph Hoyt, of Milwaukee, who—by reason of long training in all branches of law, we feel is exceptionally qualified to take up the work so ably conducted by Mr. Spooner. Mr. Hoyt has been in the Society's service since January, 1929.

In our last year's report we stated it as our plan to publish, from time to time, reports of some of the litigations (without mention of names of litigants) in order to better acquaint our members with the character of actions brought, our particular motive in doing so being an effort to help in the avoidance of suits by calling attention to the many pitfalls that frequently expose the physician to unjust and misguided attack. Owing to the change of attorneys, this plan had to be abandoned temporarily, but we trust to be able to place some such data before you from time to time during the present year.

Respectfully submitted,

Arthur J. Patek, *Chairman.*

REPORT OF THE COMMITTEE ON NECROLOGY

It becomes the duty of your committee to report that during the year ending July 15, 1929, the following physicians of Wisconsin have died. The names of those who were members of this Society are printed in bold face type:

Allen, L. P.	Ohskosh
Anderson, W. A.	La Crosse
Andre, F. E.	Kenosha
Aylward, R. C.	Madison
Bellin, J. J.	Green Bay
Beutler, W. F.	Wauwatosa
Blair, J. C.	Hazel Green
Bock, O. B.	Sheboygan
Brown, H. M.	Milwaukee
Burdon, R. M.	Green Bay
Cattanach, A. M.	Superior
Clawson, H. E.	Redgranite
Conroy, J. M.	Bayfield
Combacker, H. E.	Osceola
Dinsdale, James	Soldiers Grove
Farr, John F.	Eau Claire
Fellows, C. G.	Chicago, Ill.
Fleischer, R. J.	Milwaukee
Foat, J. S.	Ripon
Garner, E. S.	Richland Center
Graham, C. W.	Milwaukee
Gregory, Frank	Valders
Hastings, T. R.	Reedsburg
Heffron, J. J.	Milwaukee
Hoyer, G. C.	Appleton
Iversen, Michael	Stoughton
Jamieson, George	Lone Rock

Johnson, H. C. — Bruce
Jones, J. R. — Randolph
Kellner, V. V. — Maribel
Krahn, A. J. — Beaver Dam
Ladwig, W. A. — Wausau
Larsen, L. A. — Colfax
Lawrence, G. H. — Stevens Point
Lewis, P. A. — Bahia, Brazil
Loevenhart, A. S. — Madison
Marshall, F. P. — Fond du Lac
McCabe, Harry — Milwaukee
McDonald, E. M. — Beaver Dam
McIndoe, T. B. — Rhinelander
McKinley, E. D. — Madison
Morrison, M. — Westby
Morse, A. H. — Babcock
Nichols, F. C. — Wausau
Powers, C. D. — Hancock
Rosenheimer, M. H. — Milwaukee
Sheldon, C. S. — Madison
Staehle, Max — Manitowoc
Stoelting, C. W. — Oconto
Tarter, J. W. — Iron River
Thewalt, W. B. — Berlin
Voorus, C. W. — Beaver Dam
Wadey, B. J. — Belleville
Walbridge, F. E. — Milwaukee
Wenzel, J. V. — Ashland

Respectfully submitted,

The Council.

Dr. Gerry Morgan of Washington Chosen President-Elect of A. M. A.; 1930 Meeting Goes to Detroit

Dr. William Gerry Morgan of Washington, D. C., was unanimously selected as president-elect of the American Medical Association and Detroit was chosen as the next meeting place as the Portland session came to a close the second week in July. Other officers elected included: Dr. E. A. Sommers, Portland, vice-president; Dr. Olin West reelected secretary and Dr. Austin Hayden, reelected treasurer; Dr. F. C. Warnshuis, Michigan, speaker of the House of Delegates; Dr. A. E. Bulson, Indiana, vice-speaker; Dr. Chester Brown, Connecticut, reelected to the Board of Trustees and Dr. Allen Bunce, Georgia, new member of the board.

That the problem of the cost of medical care was the one problem that deserved immediate consideration of the A. M. A. and that in part this was an artificial problem, was the informal statement of President-elect Morgan in speaking to the House following his election.

"The problem perhaps most acute from the public point of view is the cost of medical care," said Dr. Morgan. "We cannot, as already suggested, undertake to apply a cure until we receive the final report of the splendidly organized committee now studying this problem.

"As I view this matter the acuteness of the present situation does not come so much from the insistent demand of the so-called oppressed ones as from the activities of that comparatively small group of well-meaning, mentally bored, more or less idle rich, who are taking this problem as an outlet for their otherwise unoccupied energies. I live in a city where 80 per cent of our population are small wage earners. The domiciliary rents in Washington are high, out of proportion to those in other cities. I have heard of no concerted action on the part of the government or of charitable organizations for the relief of this disproportionate rental burden, nor in the reduction of the cost of foodstuffs. Why, then, should this one element, the cost of medical care, be singled out as the object of philanthropically inclined people's solicitude?

"The medical profession stands ready, as always, to render adequate professional services to the people upon terms within their means, and for the indigent, the full services of the staffs of the magnificent hospitals of the country constitute our sufficient answer. Since it is claimed that the cost of medical care is excessive, it is our duty to study the problem, to ascertain what, if any, is our responsibility in the matter, and to correct any inequalities for which we ourselves are responsible.

"Certainly, it may be said that the individual fees received by physicians cannot account for complaints against us; and it may be that the true difficulty may lie in the elaborate and expensive diagnostic procedures, which the public has come to demand, as well as the luxurious nursing provisions which have come to be regarded as essential.

"This is the sort of problem to which we

must address ourselves in our work together, and to their solution I pledge you my best endeavor."

IMPORTANT ACTIONS

Other important actions of the House of Delegates at the Portland session are summarized following:

1. Rejected a resolution providing that the A. M. A., rather than state societies, should pay the expenses of delegates in the House.

2. Commended a building plan for the headquarters in Chicago and the preparation of a history of the Association.

3. Referred the question of improper hospital publicity and advertising to the Council on Medical Education and Hospitals.

4. Rejected a proposal that all papers read before the Association be automatically accepted for publication.

5. Commended a resolution by Dr. Joseph F. Smith, Wisconsin, that the Council on Physical Therapy be instructed to prepare a handbook on modalities but declared that such a publication was already under way.

6. Refused, for the second time, to establish a home for aged physicians who are indigent, declaring that their care was properly a problem for state societies.

7. Amended the Code of Ethics with respect to the subject of fee-splitting. The new section will be found in following paragraphs.

8. Commended the Department of Commerce for the type of medical examination it was providing for aviators.

9. Directed the Board of Trustees to report in 1930 on the dangers existent in, and means of prevention, for certain gases including those used for refrigeration.

10. Commended the investigation on the cost of medical care but pointed out that this is properly a problem for the physician.

11. Commended retiring President Thayer for his year of effort in reply to an attack in the press by Rev. Clarence True Wilson, chairman of the Methodist church board of temperance, prohibition and public morals.

12. Commended a resolution providing that the Judicial Council should investigate corporate practice during the coming year.

13. Condemned the American Red Cross for its change in policy in authorizing its nurses to care for patients of cultists.

REWORD ETHICS PROVISION

Following the recommendation of the Judicial Council, the House of Delegates adopted a new wording of that section of the Code of Ethics which refers to the subject of fee-splitting. The Judicial Council had declared that the former wording of the section had given proponents of division of fees an opportunity to use portions of the section in their defense. The new section now reads: "Commissions. Sec. 3—When a patient is referred by one physician to another for consultation or for treatment, whether the physician in charge accompanies the patient or not, it is unethical to give or to receive a commission by whatever term it may be called or under any guise or pretext whatsoever."

The Wisconsin delegates were given recognition when Dr. Joseph F. Smith of Wausau, senior delegate, was made a member of the House reference committee on Medical Education.

Meeting in executive session the House devoted two hours to a discussion of contract and corporate practice of medicine. The purpose of the discussion was to permit members of the Judicial Council to learn of the attitude prevalent in the several states so that it may have this on record in considering the subject matter during the coming year. Following its executive session the House released the following statement:

"In its executive session the house of delegates heard statements as to the conditions of medical practice in various states. The different forms of contract practice, group practice, corporation practice and industrial practice were discussed, also various schemes of voluntary insurance and compulsory health insurance prevailing in this and in other countries.

"It was recommended that the judicial council of the American Medical association give complete consideration to the problems set forth, and prepare for submission to the house of delegates at its 1930 session a statement of the fundamental principles in-

volved. It is recognized that the medical profession must do everything within its power to develop methods for the care of the public in illness that will provide the best type of medical service at the most reasonble cost possible."

ON PROGRAM

Among the Wisconsin physicians on the program were Drs. Carl Henry Davis, Nelson M. Black, F. H. Haessler, M. G. Peterman, Eben J. Carey and L. D. Smith of Milwaukee and Drs. Harry Steenbock, Hans H. Reese, E. A. Pohle, and C. H. Bunting of Madison.

Wisconsin registrants at the meeting included the following:

Carey, Eben J., Milwaukee
Pohle, Ernst A., Madison, Alder
Reese, H. H., Madison, Nortonia
Smith, Joseph F., Wausau, Cromwell Apts.
Steenbock, Harry, Madison, Multnomah
Anderson, N. Philip, La Crosse
Bannen, William E., La Crosse, Multnomah
Bardeen, Charles Russell, Madison, c/o Dr. Ilaf Larsell
Benton, Roy W., Milwaukee, Perkins
Butler, F. E., Menomonie, Washington
Davis, Cary Henry, Milwaukee
Eisenberg, Philip J., Milwaukee, Navarre
Hanson, Louis E., Holmen, Oregon
Houck, Mary P., La Crosse, Carroll
Ladewig, Albert W., Milwaukee, Navarre
Marshall, Victor F., Appleton, Portland
Sleyster, Rock, Wauwatosa, Multnomah
Smith, Joseph F., Wausau, Multnomah
Tucker, W. J., Ashland, 502 E. 22nd St.
Sisk, Ira R., Madison, Imperial
Smith, L. D., Milwaukee, Benson
Taylor, J. Gurney, Milwaukee, Multnomah
Wochos, Frank J., Kewaunee, Benson
Boorse, L., Milwaukee, Imperial
Fellman, George H., Milwaukee, Imperial
Haugen, Albert I., Stanley
Lademann, O. E., Milwaukee
Peterman, M. G., Milwaukee, Nortonia
Stoland, Iver, Eau Claire
Sykes, Herbert D., Milwaukee, Portland
Foerster, Harry R., Milwaukee, Cornelius
Grove, W. E., Milwaukee, Commodore

Milwaukee County Medical Society Employs Full-Time Lay Secretary; Will Manage Physicians Service Bureau

Following a unanimous vote authorizing the employment of a lay full-time executive secretary, the trustees of the Milwaukee County Medical Society, through President H. J. Gramling, announce the employment of Mr. Theodore Wiprud of Frederic, Wisconsin, effective October 1st. Following the lead of large county societies elsewhere, notably in Toledo and Portland, the Milwaukee County Society has taken over the work of the Physicians Service Bureau of that city as a direct service to the members. Based on experience elsewhere savings through this service alone will finance, within a comparatively short time, the full-time officer.

"When the present officers and directors of the Medical Society of Milwaukee County took office they conducted an extensive survey of the then existent status of the medical profession in Milwaukee County," declares President H. J. Gramling, in making the announcement.

"From this survey it was obvious that the physicians of Milwaukee County were in great need of a central nurses directory, to enable them to secure nurses within a short time with a minimum of effort.

"It was also apparent that organized medicine in Milwaukee County needed aggressive

Mr. Theodore Wiprud, new executive secretary for Milwaukee County.

rather than quiescent policies in protecting the legitimate fields of the profession.

"This survey further disclosed that for a period of about five years there had been conducted in Milwaukee County a privately owned and privately managed enterprise known as the Physicians Service Bureau. This business, although conducted in a perfectly ethical manner by its owner, had for its sole aim the handling of telephone calls for the physician who subscribed to the service while he was away from his home or office. A certain number of people would even call this bureau for a physician and allow the owner to send any physician he wished to give the call. Indeed, through the influence of the name, Physicians Service Bureau, many people even from outside Milwaukee County began to ask advice of this bureau as to the merit, standing, and ability of the various physicians and surgeons in the community.

"During this same period of time there had arisen in Milwaukee County, a practice, which while highly commendable in intent, became an evil in practice. This practice grew to an alarming extent immediately after the purchase of a pulmotor by the Milwaukee Fire Department. A well trained squad of firemen achieved signal success with their pulmotor in resuscitating gassed and drowning persons. This information, broadcast to the public in the columns of the daily press, resulted in calls for the pulmotor squad in any emergency, and for any disease from diphtheria to tuberculosis or heart disease. It soon became apparent that the indiscriminate calls for and use of the pulmotor would, far from accomplishing any good end, result in positive harm. This fact was pointed out by the members of the medical profession who met with the answer that such indiscriminate use of the fire department was due to the difficulty in securing prompt medical aid in an emergency.

"With these facts before them, the directors of The Medical Society of Milwaukee County decided that the medical profession itself could remedy the existing situation in some degree by acquiring the full ownership, control and operation of the Physicians Service Bureau. Such operation by the medical society itself, would then make it possible to offer to the public an instantaneous efficient medical service to the public in time of emergency. It would offer to the individual practitioner on the other hand, a sort of clearing house where he could be assured that his clientele would receive medical service during his absence or in an emergency by fellow-physicians whom he has selected beforehand.

"This result alone, however, in the opinion of the directors, was not sufficient. It was equally necessary that there be some active contact between the general public and the medical profession. To accomplish this, a full-time Executive Secretary was appointed, who, while conducting the Service Bureau, would also protect the legitimate interests of the profession in its relation to the public.

"While this may seem to be an experiment, it is undoubtedly a major step forward on the part of the medical profession in the fulfillment of its ideals of service to the public."

Mr. Wiprud has been manager of the Arveson–Diamond Clinic at Frederic, Wisconsin, for the past eight years. Born at Minneapolis, he was engaged in the banking business in North and South Dakota, moving to Frederic in 1919 to become cashier of the First National Bank of that city. Mr. Wiprud was born in 1891, is married, and has two children, Dorothy, 11, and Grant, 9. In the last presidential election Mr. Wiprud was chosen as presidential elector from the Eleventh Congressional District.

Dr. Wilbur N. Linn, Oshkosh, New President Medical Board; Flynn Reelected Secretary; To Hold Special Meeting to Appoint Investigator

At the regular meeting of the State Board of Medical Examiners held in Milwaukee the last week in June, Dr. Wilbur N. Linn, of Oshkosh, was elected as president of the board for the coming year. Dr. Robert E. Flynn, of La Crosse, was re-elected secretary.

A special meeting of the State Board of Medical Examiners will be held in Madison at the time of the annual meeting of the State Medical Society during the second week in September. At this special meeting applications for reciprocity will be received

and at the same time applicants for the position of investigator will be interviewed and an investigator elected. The investigator will be a full-time man whose business it will be to obtain evidence against gross cases of fraud and quackery in the field of the healing art in Wisconsin. This investigator was authorized when Gov. Kohler signed the bill providing the board with a sum of $5,000 a year for the next two years for this purpose.

The questions at the June examination follow:

PRINCIPLES AND PRACTICE OF MEDICINE

By J. Gurney Taylor, M. D., Examiner

1. Tuberculosis:
   (a) Give physical findings of a case of moderately advanced pulmonary tuberculosis involving apex.
   (b) Also give findings elicited in a case in which there is marked cavitation at same situation.
2. Pulmonary Embolism:
   (a) What are the causes of pulmonary embolism with infarction, and under what circumstances is the condition apt to occur.
   (b) Describe the symptoms and clinical course.
3. Uremic Coma: Differentiate from:
   (a) Cerebral hemorrhage.
   (b) Alcoholism.
   (c) Opium poisoning.
   (d) Fracture of skull.
4. Eczematoid ringworm of hands and feet (Dermatophytosis). Discuss the characteristics which are usually found in a moderately severe case and outline treatment.
5. Pericarditis with marked effusion: Describe symptoms, physical signs, and treatment.
6. Malarial Fever: Tertian Malaria:
   (a) Discuss three (3) characteristic symptoms.
   (b) Name the genus of mosquito which propagates same.
   (c) Give treatment and outline methods of administration, as well as time and frequency.
7. Albuminuria: Discuss:
   (a) Physiological Albuminuria.
   (b) Orthostatic Albuminuria.
   (c) Febrile Albuminuria.
8. Give symptoms and differential diagnosis of perforated gastric ulcer.

PEDIATRICS

By J. Gurney Taylor, M. D., Examiner

1. Complementary Feeding: (a) What are the indications requiring complementary feeding in the breast-fed infant? (b) Give a formula for an infant three (3) months of age, which requires complementary feeding; be specific in preparation of formula, and give complete directions for its use.
2. Given an infant apparently well, becoming suddenly ill, with what is apparently a severe abdominal pain, at first constant, later intermittent, early nausea and vomiting, prostration sudden and out of proportion to other symptoms, stools containing blood in varying amounts, temperature absent or subnormal in early stage, with palpable mass about caecum or ascending colon, what condition would you suspect? Outline differential diagnosis to be considered and treatment you would institute.
3. School Inspection:
   (a) What communicable diseases are to be looked for.
   (b) When a case of communicable disease is found, what would be your procedure regarding the isolation of the child and whom would you notify?
   (c) What is the period of quarantine required in: 1. Scarlet Fever. 2. Diphtheria. 3. Small Pox. 4. Chicken Pox. 5. Measles. 6. Pertussis. 7. Poliomyelitis?
4. Give symptoms presented in a case of Sporadic Cretinism, differentiating from Mongolian Idiocy, Rachitis and Infantilism; also outline treatment.
5. Inguinal Hernia: If an infant of 12 months of age presented symptoms and findings of an inguinal hernia, differentiate same from hydrocele.
6. Acidosis: Outline the symptoms suggestive of acidosis, and give treatment.
7. Rickets: Discuss the important features of:
   (a) Etiology.
   (b) Symptomatology.
   (c) Treatment.
8. Give symptoms of Tuberculosis Coxitis (hip joint disease). Differential diagnosis and treatment.

ROENTGENOLOGY

By J. Gurney Taylor, M. D., Examiner

1. What are roentgen rays, what is their application in the practice of medicine and how do they act?
   Differentiate roentgen rays or x-rays, ultraviolet rays and radium.
2. What can be determined by roentgen ray examination of an ankle injury? How?
3. Differentiate lobar pneumonia from different types of pleurisy by roentgenological examination.
4. Define and describe briefly the different types of roentgen ray injuries and explain their causes.
5. Of what value is fluoroscopy in diagnosis? Explain.
6. Under what circumstances might a physician be considered guilty of malpractice for failure to employ the roentgen rays?

(Continued on page XXIV)

THE JOURNAL BOOK SHELF

The Technic of Local Anesthesia. By Arthur E. Hertzler. M. D., professor of surgery in the University of Kansas. 4th edition with 146 illustrations. Price $6.00. C. V. Mosby Co., St. Louis, 1928.

Regional Anesthesia. By Gaston Labat, M. D., clinical professor of surgery, University of Bellevue Hospital Medical College, New York City. With a foreword by William J. Mayo, M. D. Second edition, revised. Octavo of 567 pages with 367 original illustrations. Price $7.50. W. B. Saunders Co., Philadelphia and London, 1928.

The Climacteric (The Critical Age). By Gregorio Maranon, professor of medical pathology in the Madrid Gen. Hospital, member of the Royal Nat'l. Academy of Medicine. Translated by K. S. Stevens and edited by Carey Culbertson, M. D., associate clinical professor of obstetrics and gynecology, Rush Medical College of the University of Chicago. Price $6.50. C. V. Mosby, St. Louis, 1929.

Imperative Traumatic Surgery with Special Reference to After Care and Prognosis. By C. R. G. Forrester, M. D., consultant, teaching staff, Illinois Post Graduate School, Chicago. Illustrations, 598. Price $10.00 net. Paul B. Hoeber, Inc., New York, 1929.

Physiology of Bone. By R. Leriche and A. Policard. Translations by Sherwood Moore, M. D., and J. Albert Key, M. D., of Washington University School of Medicine. Illustrated. Price $5.00. C. V. Mosby Company, St. Louis, 1928.

The Elements of the Science of Nutrition. By Graham Lusk, professor of physiology at the Cornell University Medical College, New York City, 4th ed., reset. Octavo of 844 pages. Price $7.00 net. W. B. Saunders Co., Philadelphia and London, 1928.

Old Age. The Major Involution. The physiology and pathology of the aging process. By Alfred Scott Warthin, M. D., professor of pathology and director of the Pathological Laboratories in the University of Michigan, Ann Arbor. With 29 illustrations. Price $3.00 net. Paul B. Hoeber, Inc., New York.

Technique of Contraception. By James F. Cooper, M. D., medical director of the Birth Control Clinical Research Bureau, clinical instructor in Obstetrics, Boston University Medical School. Day Nichols, Inc., Publishers, 15 40th St., New York City.

Spinal Anesthesia. Principles & Technique. By Charles H. Evans, M. D., clinical asst., New York Post Graduate Medical School and Hospital. Illust., 41, with 3 in color and 1 folding colored plate. Price $5.50 net. Paul B. Hoeber, Inc., New York City.

Angina Pectoris. By Harlow Brooks, M. D. professor of clinical medicine, New York University. Price $2.50. Harper & Bros., Publishers, New York City.

Diagnostis Methods in Internal Medicine. By Samuel A. Loewenberg, M. D., Assistant Professor of Clinical Medicine, Jefferson Medical College, and Assistant Physician to the Jefferson Hospital formerly Assistant Professor of Physical Diagnosis at the Medico-Chirurgical College and the University of Pennsylvania, Pa. With 547 illustrations, some in colors.

Diseases and Deformities of the Spine and Thorax. Arthur Steindler, M. D., Professor and head of the Department of Orthopedic Surgery of Iowa State University-Medical School, Iowa City, Iowa. With 76 plates. Cloth $12.50. C. V. Mosby Company, St. Louis, 1929.

The Tonsils and Adenoids and Their Diseases. Including the part they play in systemic disease. By Irwin Moore, M. B., late honorary surgeon to the London Throat Hospital for Diseases of the Throat, Nose, and Ear, Great Portland Street, and also to the Hospital for Diseases of the Throat, Golden Square, London. Cloth $6.50. C. V. Mosby Company, St. Louis, 1928.

Clinical Electrocardiograms. Their Interpretation and Significance by Frederick A. Willus, M. D. Section on Cardiology, the Mayo Clinic, Rochester, Minnesota, and associate professor of Medicine, the Mayo Foundation, University of Minnesota. Quarto of 219 pages with 368 illustrations. Cloth $8.00. W. B. Saunders Company, Philadelphia and London, 1929.

The Textbook of Clinical Neurology. For students and practitioners. By M. Neustaedter, M. D., clinical professor in neurology, N. Y. Polyclinic Med. Sch. and Hospital. With an introduction by Ed Fisher, M. D., professor emeritus of neurology, University and Bellevue Hospital Med. Col., N. Y. With 228 illustrations, some in colors. Price $6.00 net. F. A. Davis Co., Philadelphia, 1929.

Annual Reprint of the Reports of the Council On Pharmacy and Chemistry of the American Medical Association for 1928. Cloth. Price, postpaid, $1.00. Pp. 75. Chicago: American Medical Association, 1929.

New and Nonofficial Remedies, 1929, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistery of the American Medical Association on Jan. 1, 1929. Cloth. Price, postpaid, $1.50. Pp. 488; xlviii. Chicago: American Medical Association.

BOOKS RECEIVED FOR REVIEW

An Introduction to the Study of Physic. By William Herberden, 1710–1801. Now for the first time published. A prefatory essay by Leroy Crummer. Portrait in photogravure; six illustrations. Price $2.00 net. Paul B. Hoeber, New York, 1929.

The History of Hemostasis. By Samuel Clark Harvey, M. D., professor of surgery, Yale University; surgeon in chief, New Haven Hospital. With 19 illustrations. Price $1.50 net. Paul B. Hoeber, New York, 1929.

The Conquest of Cancer. By radium and other methods. By Daniel Thomas Quigley, M. D., instructor in surgery in the University of Nebraska College of Medicine. Illustrated with 334 engravings. Price $6.00 net. F. A. Davis Co., Philadelphia.

The Collected Papers of the Mayo Clinic and the Mayo Foundation for 1928, Vol. XX. Octavo volume of 1197 pages with 288 illustrations. Cloth, $13.00 net. W. B. Saunders Company, Philadelphia and London.

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Principles and Practice of Electrocardiography. By Carl J. Wiggers, M. D., professor of physiology in the School of Medicine of Western Reserve University, Cleveland, Ohio. With 61 illustrations. Price $7.50. C. V. Mosby Company, St. Louis, 1929.

Osteomyelitis and Compound Fractures. By H. Winnett Orr, M. D., chief surgeon of the Nebraska Orthopedic Hospital. Illustrated. Price $5.00. C. V. Mosby Company, St. Louis, 1929.

Clinical Laboratory Methods. By Russell Landram Haden, M. D., professor of Experimental Medicine, University of Kansas, School of Medicine. With 69 illustrations and 4 color plates. Third edition. Price $5.00. C. V. Mosby Company, St. Louis, 1929.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Secretary, Mr. J. G. Crownhart, 119 E. Washington Ave., Madison, Wisconsin. These new books will be loaned for an inspection period only.

Edema and Its Treatment. By Herman Elwyn, M. D., Assistant Visiting Physician, Gouverneur Hospital, New York. Cloth $2.50. The Macmillan Co., New York, 1929.

In this book the various forms of edema are described, for example, the edemas of heart failure, lipoid nephrosis and glomerular nephritis are considered and discussed.

The author analyzes the numerous theories concerning the cause of edema and he comments upon the different forces held responsible for edema. After a rather thorough review of the problems he considers edema as the result of a disturbance in the balance between the amount of water taken in and its rate of movement from the tissues to the blood stream. The author assumes that there is a water regulating center in the brain, and that the chief cause of edema lies in a disturbance of this regulator.

There is a chapter devoted to the treatment of edema.

For one looking for a review of the theories concerning the problems of edema, this study would be valuable. This book is like most of the other works on edema, in that it is simply a review without the presentation of any real investigative data substantiating any theories or assumptions.—F. D. M.

An Introduction to The Study of Physics (Now for the first time published) by William Heberden (1710–1801) with a Prefatory Essay by LeRoy Crummer, with a reprint of Heberden's "Some Account of a Disorder of the Breast." Portrait in photogravure. Six illustations. Price $2.00 net. Paul B. Hoeber, Inc., New York, 1929.

In this volume the author has combined three theses as follows: A) The Prefatory Essay, by the author; B) An Introduction to the Study of Physic, by Heberden, and previously unpublished; C) Heberden's Some Account of a Disorder of the Breast. It is evident that the author devoted considerable time and energy in collecting the data presented in this small volume. The Prefatory Essay contains some interesting remarks on the medical life of Heberden and the author's experiences in collecting the data are very entertaining.

An introduction to the Study of Physic, is a collection of essays on subjects called by Heberden "frontier studies". In the group are chapters on Botany, Anatomy, Surgery, Ancient Greek and Latin Medical Writers, etc. In connection with each essay is a catalogue of the books recommended as introductory books in that subject.

Lastly there is the very important and rare reprint of Heberden's "Some Account of a Disorder of the Breast." This is a short essay of six printed pages, and it is here that the term angina pectoris was introduced.

The author is to be complimented and the publishers commended for producing this form of medical literature. F. D. M.

A Warning--Particularly for the Tuberculosis Sick

(Continued from page 367)

at the same time is a measure of the value obtained from heliotherapy.

5. That the signs of an overdose are a tired feeling, an elevation in temperature and increase in pulse rate, headache, nausea, increase in cough and expectoration (if one or more of these symptoms are manifest an hour after the treatment, it is Nature's warning of an overdose.)
6. That the eyes and upper part of the head should be shielded from the rays.
7. That the sun treatment should not be taken for an hour before or an hour after the meal; nor should it be taken at mid-day when the sun is hottest.
8. That when the sun is not shining or when the individual is oversensitive to the direct ray, benefit is received by exposing the body in the shade. This benefit comes from the skyshine (the reflected ray) and from the air bath, which is of very great value if the body is not allowed to chill.

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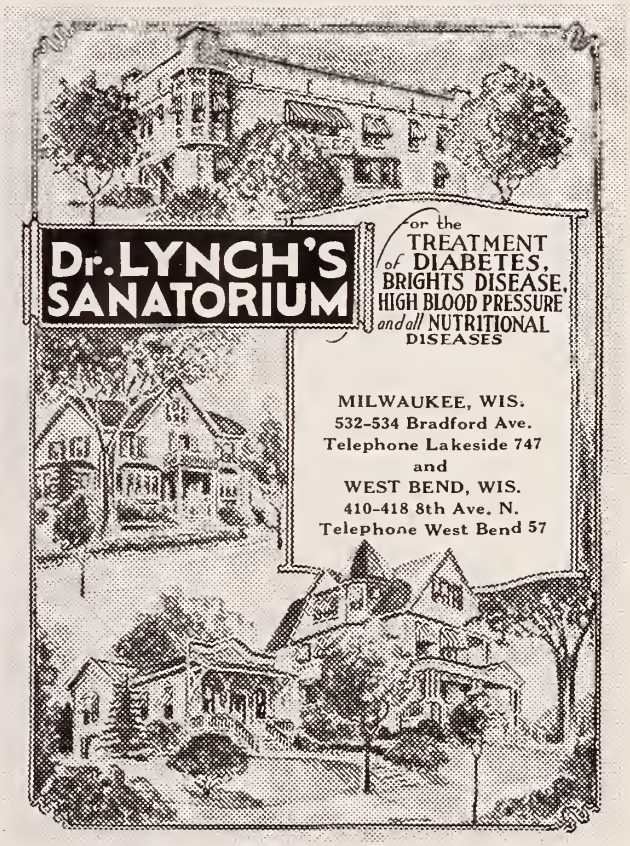

Medical Board Questions

(Continued from page 401)

OBSTETRICS

By Royal C. Rodecker, M. D., Examiner

1. What factors favor the occurrence of abnormal presentations of the foetus at term?
2. Discuss the influence of early and late primarity, respectively, upon the course of labor.
3. Discuss treatment for persistent L. O. P. presentation.
4. Under what conditions is intercranial hemorrhage likely to occur in the new born child?
5. Define first, second, and third stages of labor, (b) Which is most dangerous to child and mother?
6. What factors favor the occurrence of tubal pregnancy?
7. Give treatment for post partum hemorrhage.

GYNECOLOGY

By Royal C. Rodecker, M. D., Examiner

1. What is subinvolution of the uterus? Discuss its causes and results, and indicate its treatment.
2. What conditions aside from pregnancy or malignant tumors may cause prolonged uterine bleeding?
3. Etiology, symptomatology, and treatment of salpingitis.
4. Give type and symptoms of fibroids of the uterus, discuss treatment.

SURGERY

By Robt. E. Flynn, M. D., Examiner

1. Discuss basal skull fracture as to symptoms, diagnosis and treatment.
2. Give preoperative and surgical treatment of a gangrenous toe in a diabetic person.
3. (a) How would you diagnose and treat a subphrenic abscess?
   (b) Give differential diagnosis.
4. (a) How would you distinguish between toxic and non-toxic goitres? Classify them.
   (b) What preoperative treatment would you advise in the more severe toxic forms?
   (c) What is the value of basal metabolic readings?
5. How would you treat a simple transverse fracture of the anatomical neck of the femur in a middle aged, able bodied, laboring man?
6. Differentiate acute appendicitis briefly in a woman in the early forties?
7. (a) How would you treat shock?
   (b) Discuss spinal anaesthesia as to value, technic, and dangers.
8. How would you diagnose and treat an acute osteomyelitis of the tibia in a child?
9. (a) What surgical treatment would you advise for varicose veins of the legs?
   (b) What precautions would you observe?
10. (a) What kidney conditions may produce a hematuria?
    (b) Differentiate briefly and outline method of diagnosis.

MATERIA MEDICA

By T. J. Sheehy, M. D., Examiner

1. What symptoms would indicate that the limits of therapeutic dosage had been reached during the administration of (a) Atropine (b) Digitalis (c) Mercury.
2. Discuss briefly the value of vaccine therapy.
3. Discuss the uses and methods of administration of mercurochrome.
4. Suggest a drug or drugs that may be used in relieving the pain due to (a) Presence of a foreign body in the cornea (b) Intestinal spasm (c) Hyperchlorydia (d) Bronchial cough.
5. Insulin: (a) Outline the rules governing administration as to time, dosage and method in: 1. Severe chronic diabetes. 2. Diabetic coma. (b) What are the dangers of administration? (c) How can these be prevented?
6. Give principal therapeutic use of hexamethylenamin.
7. Discuss the principal use of pituitrin in obstetrics.
8. Compare the analgesic value of morphine and chloral-hydrate.

TOXICOLOGY

By T. J. Sheehy, M. D., Examiner

1. Discuss the symptoms of poisoning by arsenic.
2. Treat a case of acute silver nitrate poisoning.
3. Treat a case of acute veronal poisoning.

ANATOMY

By Wilbur N. Linn, M. D., Examiner

1. Describe the gross anatomy of the larynx.
2. Give an anatomical description of the bronchial tubes.
3. Name the structures that support and retain the bladder in position in each sex. Also blood and nerve supply of the bladder.
4. Trace blood supply of hand in its course from the shoulder to finger terminals.
5. What is contained in the middle mediastinum?
6. Give anatomical description of the mammary glands.
7. Give origin, insertion and action of tibialis anticus. Pronator radii teres. Gracilis.
8. Describe a Haversian system.

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EYE, EAR, NOSE AND THROAT

By Wilbur N. Linn, M. D., Examiner

1. Differentiate between iritis, glaucoma and conjunctivitis, and give common treatment for each.
2. Give three subdivisions of the ear. A short description of each and differential diagnosis of impaired hearing of each subdivision and suggestions as to treatment.
3. Give treatment for nasal hemorrhage. What is the usual source of the blood and predisposing conditions?
4. Give method of examining the tonsils and give three types of tonsils which should be removed. What after care would the patient require following tonsillectomy?

PHYSIOLOGY

By J. B. Brewer, M. D., Examiner

1. What is an antigen?
2. How many classes of food are there; name them.
3. What effect has galvanization of a sensory nerve on general blood pressure?
4. At what time does the impulse of the heart take place against the chest?
5. What is the action of pancreatic juice on fats?
6. What layers constitute the blastoderm?

MEDICAL JURISPRUDENCE

By J. B. Brewer, M. D., Examiner

1. Give the differential diagnosis of human from animal blood.

DIETETICS

By J. B. Brewer, M. D., Examiner

1. What diet is to be given in the constipation of artificial fed infants?
2. Outline diet in lobar pneumonia.

CHEMISTRY

By J. E. Guy, M. D., Examiner

Answer any three of the following questions. Number each question with the number given it below.

1. What is an element? What are symbols? Name six Elements and give the symbol of each.
2. What is Fe? Where found? How used in medicine?
3. What is nitrogen? Give its symbols and properties. Where does it occur?
4. Give the approximate composition of air. What is meant by relative humidity?

PATHOLOGY

By J. E. Guy, M. D., Examiner

Answer any five of the following questions. Number each question with the number given it below.

1. What is necrosis? Describe briefly. What is gangrene? Describe briefly. Differentiate necrosis from gangrene.
2. Define atrophy. How does atrophy differ from hypoplasia? What is meant by physiological atrophy? Give two examples.
3. Name two varieties of pathological red blood cells, and tell in what disease each is found.
4. What is a leucocyte, give the average number per cubic millimeter of normal blood, and the variations which may be considered normal.
5. Describe briefly the pathological changes occurring in Hodgkin's disease.
6. Give the pathology of (a) Carbuncles, (b) Bed Sores.
7. What is meant by thrombosis? Where does it occur? Give two causes. What is an embolus? In which set of blood vessels do they lodge? Arteries or veins? Why?

PHYSICAL DIAGNOSIS

By E. C. Murphy, Examiner

1. What are the diagnostic signs of retropharyngeal abscess.
2. Name the diagnostic points in secondary syphilis.
3. Describe the diagnostic characteristics of the eruption of typhoid fever; small pox; chicken pox.
4. Name four characteristic symptoms of exophthalmic goiter.

Answer three only.

NEUROLOGY

By E. C. Murphy, Examiner

1. What is the significance of the patellar reflex; Kernig's sign; Romberg's sign; Argyll-Robertson pupil?
2. Give the etiology of multiple neuritis.
3. Give the etiology, symptoms and treatment of chorea.
4. What are the causes, symptoms, and prognosis of Bell's palsy?

Answer three only.

HYGIENE

By E. C. Murphy, Examiner

1. What diseases are propagated by drinking water? How can their spread be prevented?
2. Define the word "Nuisance" in a hygienic sense. Name some of the nuisances dangerous to health.

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Urological Problems in General Practice*

By JAMES C. SARGENT, M. D.
Professor of Urology, Marquette University
Milwaukee

In no single branch of general medicine have such enormous strides of understanding and progress been taken as in that group of diseases involving the urinary tract and now commonly classed under the special heading of urology. Not to mention the ordinary advances the result of the ever increasing knowledge in the fundamentals of disease, the inventions and discoveries specifically adapted to the study of diseases of the urinary tract have brought a progress in the diagnosis and treatment of these diseases without adequate parallel in the whole history of medicine. Frankly, to those of us devoting our entire thoughts and practice to this after all quite limited field, there is much new and worth while that escapes us and there seems no end to the task that is ours of keeping abreast of the times. Having first come to such an open confessional, it is hoped that, in this somewhat prosaic discussion of a few of the common urological problems arising in general practice, nothing suggesting either pedantry or paternalism may appear.

Within the memory of most of us time was when an old man forced to seek surgical relief for his prostatism, even in the hands of the best of surgeons, had little better than two out of three chances of surviving. Such a mortality prohibited prostatectomy except as an extreme and final expedient. The same operation done nowadays in skilled hands carries a mortality hardly more than that of childbirth. In spite of the enthusiasm and confidence that these figures inculcate in the urological surgeon, the fact still remains that the vast majority of men bothered by some degree of prostatic overgrowth can and do, if properly cared for, get along quite well without prostatectomy and without an untimely death.

The management of prostatism is and should always be essentially a problem of general practice. At least until surgical correction becomes a necessity there is nothing either in the armamentarium or in the experience of the urologist that offers an especial advantage to these old men. A gradual but very slow weakening of the urinary stream, with the usual slight day and night frequency, is best left entirely alone. Even to those with such slight prostatic enlargement, however, acute, complete retention of urine occasionally comes the result of undue exposure or of forced overholding. This is by no means the disaster it may appear to be. After a few days of hot sitz baths, some internal alkaline diuretic, and very gentle as well as quite frequent catheterization, these men usually find themselves much wiser but no worse for their experience. I said "quite frequent catheterization." Here, as in all other types of urinary retention, the temptation seems always to be to defer use of the catheter as long as possible, completely forgetting that microscopic injury done the bladder mucous membrane by extreme overdistention has very much more to do with subsequent bladder infection than does even uncleanliness of the catheter.

Though such cases of mild prostatism are at once the most common and the most easily managed, one in general practice is confronted at times with problems of a far more difficult type. Certainly not the least of these is the rather frequent question of the need of operation. Though the fact be granted that prostatectomy, properly done, is exceedingly safe and certainly curative, it still has very

* Read before the Wood County Society, at Marshfield, Wis., on March 7th, 1929.

many substantial drawbacks that do not allow it to be taken too lightly.

At times situations arise, the result of prostatic overgrowth, that not only resist all ordinary treatment but threaten both happiness and health to a degree demanding surgical correction. Some of these are too obvious to warrant more than mention. Prolonge complete retention of urine requiring regular catheterization beyond hope of recovery; severe and lasting hematuria resulting in grave anemia; intolerable cystitis not controllable by ordinary means: these certainly demand the permanent relief that only surggery can offer.

All prostatics, however, do not present a picture so demanding. There is the man whose recent years have seen the comparatively rapid development of a bothersome difficulty and frequency of urination; who has been losing weight and physical vigor; in short, who has been aging rapidly. Examination may show a bulging bladder or, if not, a catheter finds five or ten ounces of urine remaining in the bladder after voiding. Though he may have been getting along fairly well and might even resent the suggestion that he is beginning to fail, to his relatives or his physician who have known him for years, it is evident that something must be done to check his failing health. The problem here is a real one. Many such men will be found to be made increasingly comfortable, regaining their weight and strength and taking a new lease on life from the simple expedient of careful, occasional catheterization. Most, however, will not, and, unless treated surgically, come to an untimely end.

Occasionally the paradoxical symptom of urinary incontinence dominates the picture of prostatic disease. That constant dribbling of urine should result from severe obstruction at the bladder neck is one of the curiosities of medicine. It, of course, is not a true incontinence, else the bladder would be constantly empty. To the contrary, it is constantly full to bursting, and the incontinence is in truth simply an overflow. This occasional situation always indicates severe obstruction and requires very careful and gradual release of the retained urine to avoid the sudden development of uremia. Though almost incredible, it is true that such a patient may bear up under this severe degree of obstruction for months or even years and yet, if once suddenly and completely relieved of his back pressure by catheter, promptly go into fatal uremia.

It may have been noted that this subject of the handling of prostatics has been discussed without reference to age or to the size of the tumor in the rectum. Though each has some value in determining the course to pursue in any given case, each is far more liable to mislead than to lead if other factors are not properly considered.

CYSTITIS

In general practice, cystitis in one or another form is encountered with greater frequency, if not more importance, than any of the various urological conditions. Even more than that, it is a problem of more difficult and unsatisfactory solution than almost any other. If it is of satisfaction to anyone, it might be said here that in this matter the physician in general practice holds no monopoly. Cystitis is the bug-bear of the urologist as well.

If the specialist possesses any advantage over the physician in general practice in the management of cases of cystitis, it can be due to nothing other than the fact that the more thoroughly his cases are studied, the fewer cases of cystitis he sees. That may seem a paradox, but it is true. The more thoroughly a given case of cystitis is studied, the more frequently it develops that it is not after all a case of cystitis. It is, of course, idle to deny the occurrence, frequent in fact, of cases of mild, or even moderate, cystitis of a week or two duration,—so-called acute simple cystitis and especially common in the female—but insofar as a pure cystitis of any material severity and length is concerned, to the urologist this does not exist.

Simple cystitis is always of short duration and distinctly self-limiting. As a matter of truth, careful investigation, even of the more mild cases, usually proves the cystitis to be secondary to an otherwise symptomless renal infection. Urotropin, or some other internal antiseptic, usually brings prompt results in

such cases. At times the distress is too severe, however, and one of the alkaline diuretics is found more suitable.

Once a cystitis is found to be protracted beyond several weeks, some other contributing factor should be sought for, the correction of which would permit the bladder to recover. The longer the cystitis lasts and the more severe it is, the more certainly will some underlying cause be found and the more certainly will the cystitis not be cured until such cause is found and removed.

Before taking up the various conditions commonly symptomatized by chronic cystitis it might not be amiss to pay our respect to that pesky and persistent nightmare to us all —the irritable bladder of women. A large number of women, especially those beyond midlife and who have borne children, are bothered themselves and in turn bother us with the signs and symptoms commonly indicating cystitis. Examination of the urine, however, usually fails to disclose the presence of pus. Irritable bladder in these women, upon investigation, commonly proves not to be a true cystitis but a chronic low grade inflammation of the urethra. The usual urinary antiseptics are without effect. Alkalinization of the urine with soda or citrocarbonate may give temporary relief. Most of these women are distinctly improved by stretching the urethra with large sounds or by the injection of nitrate of silver. Of course, if examination of the urethra discloses a caruncle, its radical removal is the only procedure promising relief.

Chronic cystitis of moderate degree, associated with pus in the urine but unaccompanied by any other symptoms, can, at least for awhile, safely be presumed to be due to an otherwise symptomless renal infection. Most of these patients are benefited and some actually cured by urotropin (or, if you choose, any other urinary antiseptic). To be effective, urotropin must be given either in the presence of an acid urine or in combination with some acidulating drug, such as sodium acid phosphate, to insure the liberation of formaldehyde upon which its virtue is based. If internal medication is given a fair trial and fails to cure, that in itself is almost absolute proof that the cystitis persists because of some underlying condition that itself will not yield to the medication.

Certainly, there is nothing more disappointing than to have spent many months in worrying along with local treatment and internal medication in a case of chronic cystitis only to find later that one or two irrigations of the kidney pelvis through the ureteral catheters promptly and completely cures the underlying pyelitis, and the cystitis, of its own choice, disappears. It becomes an actual embarrassment when, after months of futile medication, stones are found to have been present somewhere in the urinary tract and the cause of the cystitis. It is really tragic when tuberculosis of the kidney is found to be the cause of a chronic cystitis, during the prolonged treatment of which much very valuable time has been lost.

It can fairly be said that cystitis should be treated by the general practitioner and that it is not a problem properly requiring special management. All of this up to a certain point, however. When ordinary internal and local treatments have been given a fair trial over a period of several weeks or a very few months and have proven not to be definitely curative, the quicker he takes his consulting urologist into his confidence, the sooner will the physician, as well as his patient, be relieved.

PYELITIS

Before leaving the inflammations of the urinary tract, it may be well to refer to the subject of pyelitis. Acute pyelitis in its usual form presents the picture of chills and fever, accompanied by renal pain and some cystitis. It is most commonly encountered in children and in pregnant women. It usually runs its course in two or three weeks and responds readily to the usual internal medications. Especially in adults, the toxemia often becomes very profound, the fever running to alarming heights. This commonly occurs when the ureter on one or both sides becomes occluded with thickened pus or by inflammatory edema. In either event, a ureter catheter passed to the renal pelvis promptly reestablishes good drainage, whereupon the toxemia subsides, and the fever promptly drops. In such extreme cases, catheter

drainage not only brings prompt relief but prevents very serious lasting damage to renal tissue. When pyelitis of severe degree complicates pregnancy, ureter catheter drainage for a few days is very often the means of forestalling miscarriage and, therefore, conserving fetal life.

Pyelitis in infants and young children is in many respects a problem entirely different from that of adults. Its chief difference lies in the fact that the alkaline diuretics are as a rule far more effective than the ordinary urinary antiseptics so successfully used in treating the same condition in adults.

Reference to the urological problems of infancy and childhood cannot be complete without mention of the fact that these little tots fall heir to exactly the same diseases, possibly excepting the tumors, that their grown-ups suffer. The more carefully they are studied, the more cases of tuberculosis, stone, hydronephrosis, and the like, are found. With the modern infant cystoscope, children of any age are subjects for just as complete and thorough examinations as are adults.

And, finally, the problem of hematuria. There is no symptom that man or woman complains of that is more liable to indicate serious disease and more thoroughly demands prompt and complete investigation than that of blood in the urine. The one factor that makes hematuria possibly the most difficult problem of general practice is that of its pernicious tendency, regardless of its cause, to stop of its own accord within several days. Only because of this have the various so-called stiptic drugs had any chance of gaining credit, and the confidence that they have erroneously gained has, by the procrastination it has prompted, been the cause of anguish and heartaches beyond description. Hematuria is never a disease. It is always a symptom and a very grave one at that.

Technique of Functional Therapy of the Common Fractures as Practiced at the Workman's Accident Hospital, Vienna

By JOHN O. DIETERLE, M. D.
Milwaukee

Under the directorship of Dr. Lorenz Boehler the management of fractures at the Accident Hospital in Vienna has been placed on a high plane of efficiency. The writer feels certain that the series of notes herein recorded will be of interest because of the novelty and simplicity of the methods employed, which are, in every case, aimed at getting accurate results and returning the patient to his job as quickly as possible. No reference is made to the unusual types of fracture. It will be seen that functional use of the injured member during the early stages of treatment is the keynote rather than non-use followed by more or less prolonged physiotherapy.

ANESTHESIA

Two per cent novocain solution with or without adrenalin is used as a routine. The syringe is boiled and may be placed in 75% alcohol between injections. A sterile forceps should always be used to attach the needle. Injection is made directly into the fracture site even when it extends into a joint. The greater the hematoma, the more rapid is the spread of anesthesia. In dislocations the injection is made directly into the joint. Anesthesia is present in 5 to 10 minutes or less and lasts for several hours, allowing attempts at reduction 3 or 4 times if necessary. Muscular relaxation is satisfactory as soon as pain has been relieved.

PLASTER TECHNIQUE

Plaster bandages are applied directly over the unshaven skin without padding. Close coaptation of plaster splint to the injured part insures alignment and prevents displacement. Functional use may be allowed from the start in certain fractures. Careful moulding of plaster about bony prominences prevents pressure necrosis.

FUNCTIONAL USE

Functional use of a member keeps the joints from stiffening. Exercise of the forearm prevents stiffening of the shoulder:

walking on the leg keeps the immobilized ankle from getting stiff. The return to normal is much more rapid and bone atrophy, seen in cases treated without exercise, is not found.

COMPOUND FRACTURES

Debridement is done including the top layer of exposed bone. The skin is sutured after painting exposed area with iodine. Where a cast is used, a window is cut out over the wound and a pressure bandage applied to prevent edema and resulting necrosis of the skin edges.

THE UNNA BANDAGE

Immediately after removal of a leg cast an Unna zinc-lime bandage is applied for support and to prevent swelling. It is left on for a period of 6 weeks and renewed if necessary. Loosening of the bandage may be prevented by painting it daily with a solution consisting of 94 parts of alcohol and 6 parts of formalin. The bandage should always extend from the toes to the popliteal space.

FRACTURE RECORD

An outline of the bones, showing the fracture graphically, is made on the wet cast with indelible pencil, with dates of application and probable date of removal.

FRACTURES OF THE FEMUR

If these bed-ridden patients are placed on an apparatus permitting exercise, hypostatic pneumonia, bed sores, and joint stiffness need not be feared. After x-ray examination the patient is placed on a Braun fracture frame. (Fig. 1.) Extension is made either by moleskin adhesive strips or by Steinmann nail driven through the tibia just posterior to the tibial tubercle. It is important that the nail admit of mobility in the tractor for exercise will be more easily accomplished. (Fig. 2.) Calipers may also be employed above the knee. Weight necessary may be from 20 to 30 pounds pulling in the axis of the femur. The foot is kept in right angle position by a two-pound weight over a pulley on the fracture frame. More than one pulley is never used for each weight, for multiple pulleys may subtract over 50% of the pull.

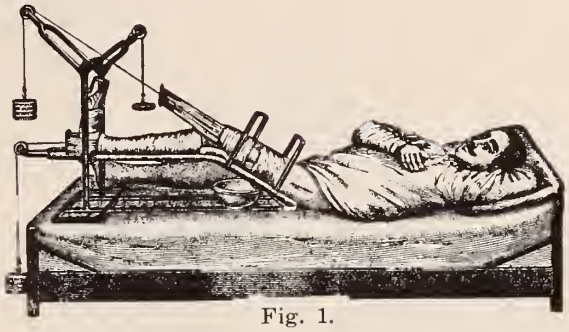

Fig. 1.

Counter extension is maintained by a padded cubical box about eight inches wide placed at the foot of the bed. The well foot "stands" on the box. (Fig. 3.) The angle of abduction cannot be given in degrees, but must be judged by looking at the leg itself. Repeated measurement of legs is taken from day to day. If not of normal length after a few days, more weight is added; if normal, the weight may be reduced and checked daily.

Passive exercise of the knee joint is begun after one or two weeks by simply removing the weights and foot bands. (Fig. 4.) Exercise is carried out two to four times a day for 15 to 30 minute periods. Active mobility is encouraged from the start. After correct length has been maintained for two weeks by means of metal pin extension it may be replaced by means of calico bands incorporated in the Unna bandage. The technique is as follows: One coat of Unna paste is applied on the thigh, then one layer of coarsely meshed gauze wound circularly, then another layer of paste. Traction bands are then applied over the paste (4 inches wide). More paste is applied, then another layer of gauze followed by a final coat of paste. This apparatus is applied on the thigh while the Steinmann pin is still in place and left to dry for 24 hours. At the same time a similar one is applied on the leg and foot. Traction is then transferred to the Unna bandage.

The pin is removed after first sterilizing with benzin and iodin. The Unna bandage gets loose in a few weeks and must be replaced.

In multiple fractures of the shaft it is important to line up the superior and inferior fragments without undue attention to those intervening. Boehler gives the following estimates for firm callus formation:

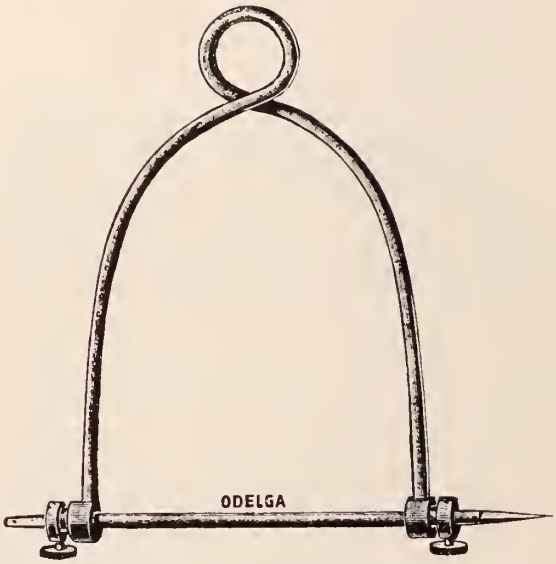

Fig. 2.

Lower third:
5 to 6 weeks if not transverse
7 to 8 weeks if transverse

Middle third:
6 to 7 weeks if not transverse
8 to 9 weeks if transverse

Subtrochanteric:
9 to 10 weeks

Trochanteric:
10 to 12 weeks

Extracapsular:
10 to 12 weeks

Intracapsular:
5 to 10 months

Walking is allowed as soon as traction is removed, at first with crutches, then with a cane. Light work is allowed a month or two later.

A malunion not over 10 weeks old may be refractured over a wooden wedge under spinal anesthesia. The fracture is then treated as a fresh one. More weight may be necessary for the correction because of muscle shortening.

In old trochanteric and neck fractures, where the angle between shaft and head is poor, first determine how much the angle deviates from the normal 130 degrees on the x-ray plate. Under spinal anesthesia an incision is made over the upper end of the shaft and two Steinmann nails, or, better, Schanz screws, are driven into the shaft two inches above and below the level of a proposed osteotomy. (Fig. 5.)

The osteotomy is then done at the level of the ischial tuberosity. Sufficient abduction to have the screws meet at an angle (Fig. 5) which is approximately that which was lacking from 130 degrees in the x-ray, is allowed. A cast is then applied from the costal margin to the foot, incorporating the screws, the wound having been closed with through and through sutures. The operation is best carried out on a traction table.

Likewise in pseudarthrosis of the neck a great deal of disability is caused by the coxa vara position and is relieved by osteotomy under control of the angle as above described. Walking is much improved and shortening is so much reduced that limp is nearly eliminated.

In all femur, leg and ankle fractures arch supports must be employed.

FRACTURES OF THE TIBIA AND FIBULA

Injury to the soft parts prevents immediate application of a non-padded case. Traction is therefor carried out by means of calipers or nail driven into the calcaneum under infiltration anesthesia. About six pounds of weight is used over one pulley. (Fig. 6.) Anterior dislocation of the upper tibial fragment may be prevented by allowing the calf of the leg to sag lower in the fracture frame. A six-inch bandage is so wound around the frame that it is taut where thigh and popliteal space rest, it is then wound loosely to allow the calf to sag. The portion supporting the Achilles tendon is wound tightly and the heel extends over the free edge of the bandage. The difficult typical dislocation of the upper fragment will now disappear under the effect of traction.

Where traction has been used a cast may be applied after three weeks. The patient then walks on the cast for three or four weeks longer if the fracture is spiral, comminuted, or oblique. (Fig. 7.) After the removal of cast and subsequent Unna bandage the medial side of the heel (not sole) is raised one-half to three-eighths of an inch.

FRACTURES OF THE ANKLE

After novocain injection (20 cc.) into one or both sides of the ankle, reduction can be made without pain. The following state-

ment by Boehler is of some importance. The usual assertion that fractures of the malleoli, especially the lateral, are to be immobilized in supination leads to difficulty in many cases. The important point in preventing subsequent flat foot is rather to see that the malleoli are pressed together, because flat foot afterwards is due to widening of the ankle joint. Ordinary flat foot does not occur in the ankle joint but in the joints just central to the metatarsus. Further, putting up the foot in supination often leads to supination contracture of the forefoot. An attempt then to place the metatarsal heads flat on the floor necessitates an actual valgus position of the calcaneum and a strain on the outer malleolus. The entire foot is therefor put up in moderate valgus.

Materials needed: one roll of gauze bandage 3 inches by 10 yards; four rolls of plaster 6 inches by 10 yards; a light iron stirrup 20 inches long, ¾ in. wide, and ⅛ in. thick. (Fig. 7.) Cross pieces may be rivetted onto the upper end of the iron for stability.

Patient holds the leg flexed 45 degrees at the knee. The surgeon sits opposite on a low stool. The head of the fifth metatarsal rests on the operator's knee to get pronation of the forefoot. While the surgeon reduces the dislocation and brings the malleoli close together an assistant prepares a posterior plaster splint. This is applied on the back of the leg and carefully moulded around the heel and foot. Bandage applied to hold in

Fig. 3. Simple fracture bed exactly flat mattress on wooden platform. Leg on Braun frame. Twenty pounds of caliper traction on femur. Well leg "stands" on padded box to assist counter-traction. Two pounds upward traction to prevent foot drop and rotation.

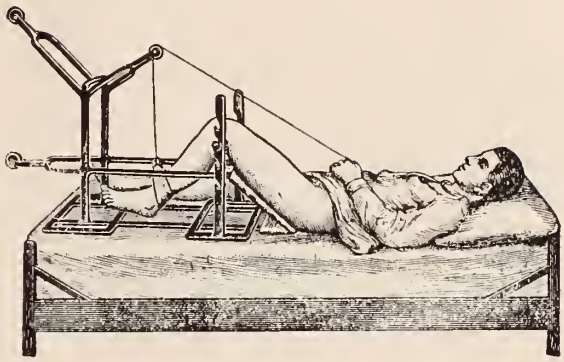

Fig. 4.

place. Second, third, and fourth rolls of plaster are applied circularly covering the leg to the knee. Plaster should extend out to the ends of the toes on the plantar surface only. X-ray check is now made.

After the plaster has set, the stirrup is applied over the cast with the bottom of the "U" extending about 1¾ inches below the heel of the cast. The iron must point in the axis of the leg. One plaster bandage holds the stirrup in place. Usually the patient can walk at once. After a few days it may even be possible to do certain kinds of work. Where there is indication of disturbance of circulation the cast is spread apart and even removed, leaving the posterior mould in place. A new plaster is then applied when the swelling has subsided.

Plaster is removed in 6 to 8 weeks. An Unna bandage is then applied to be worn for two months with an arch in the shoe later.

FRACTURES OF THE CALCANEUM

Pain is the rule in these cases after treatment. To reduce, tenotomy of the heel cord is usually unnecessary. The thigh is bandaged to a frame somewhat similar to that shown in Fig. 6. Infiltration anesthesia is made in both sides of the heel and heavy calipers applied. Forcible traction is made on the heel while the operator applies a cast like that described for ankle fractures. Traction is kept up until the plaster is set when the tongs can be removed. The iron stirrup is applied and patient allowed to walk at once. Plaster is removed in 6 to 8 weeks followed by Unna bandage and arch support.

FRACTURE OF THE METATARSALS

As a rule there is no overriding unless three or more are broken. Apply a cast as for ankle fracture moulding the plaster carefully into the longitudinal and transverse arches. A stirrup is then applied and patient walks at once. Four weeks in plaster is required.

When a number of bones are broken and overriding is present traction may be necessary on the toes. A "U" shaped iron projecting forward as in the "banjo" splint for the hand, is fastened to the cast. Traction with glued on bands is ineffective on the toes so that rustproof wire is run thru the skin of each toe, from which traction is applied for a month. Traction is then discontinued and a walking iron applied. After a week the cast is removed. It is important to accurately reduce the first and fifth metatarsals at the expense of the middle bones.

FRACTURES OF THE HUMERUS

It is essential that the arm be maintained in the so-called mid position. When the arm hangs in a sling the deltoid is stretched and the subscapularis (the strongest abductor and internal rotator) atrophies and shortens. It is difficult later to abduct the arm and movements demanding external rotation, such as employed in fastening the rear button of one's collar, are greatly hindered. The mid position of the arm is one of 90 degrees abduction and 30 degrees forward angulation from the frontal plane. The mid position of rotation must also be maintained. This is violated in certain splints such as the Mitteldorpp triangle. The arm placed in the position required by the latter is very uncomfortable because the external rotators of the humerus are stretched. The correct position is obtained when arm, elbow, and shoulder are the same distance from the floor. In Boehler's clinic a splint, consisting of ladder-like sections of wire, is fashioned for each individual case. (Description of this splint is omitted.) The aeroplane splints with traction arrangement as used in this country serve equally well.

One injection of novocain (20 cc.) is made into the fracture site. The splint is then applied in the above position. Traction strips are applied and reduction attempted by manipulation and extension. A light moulded plaster splint may be laid along the posterior surface of the entire arm up to the shoulder in shaft fractures below the surgical neck. Exercise is carried out from the start. If the elbow joint is kept in motion the shoulder joint will not become stiff. The fingers and wrist can be moved at once. Pronation and supination of forearm begins the next day. Active motion of the elbow is usually not possible for three or four days but passive motion can be done the following day. The humerus must not be rotated. The patient grasps a broomstick in both hands in the horizontal position and slides the hand along the stick first to full extension, then to right angle flexion.

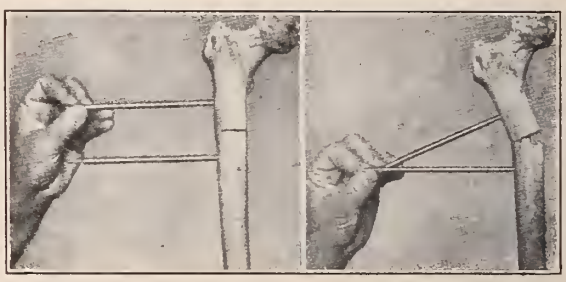

Fig. 5. From A. Schanz "Practical Orthopedics."

Callus is usually firm in 4 weeks unless the fracture is transverse. It is tested by bending and when the arm can be lifted above the splint the apparatus is removed.

SUPRACONDYLAR FRACTURES

When the forearm is normally in the resting position it lies in pronation. In supination the pronator teres and associated muscles are under tension. Reduction of the fracture is therefor better maintained if the forearm is kept pronated.

Twenty cubic centimeters of novocain is injected. Reduction is attempted by traction on the elbow in right angle position with forearm pronated. A plaster moulded splint is then applied on the back of the arm and twisted a bit to fall along the dorsum of the pronated forearm extending down to the knuckles. Traction is kept up until the plaster is set. A wet starch bandage is applied over this. X-ray check is made. The arm

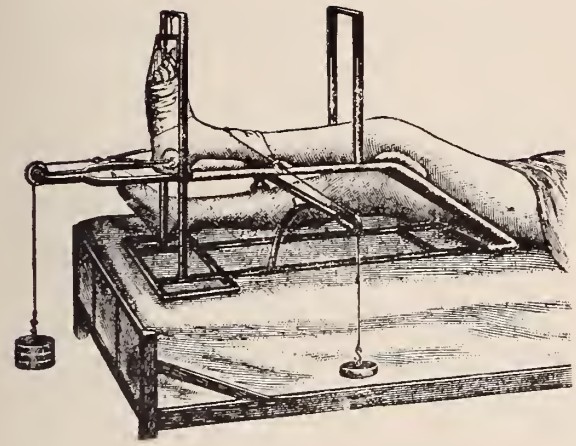

Fig. 6.

is hung in a sling and finger exercise and abduction of arm started at once. Removal of the splint in 4 weeks. Massage must be employed in this fracture. Boehler says, however, that massage before firm callus formation is highly undesirable in this or in any fracture.

FOREARM FRACTURES

The hand should be supinated in fractures of the upper third. For those of the middle and lower thirds the mid position is used (such as would be present when the hand is placed on the epigastrium).

Reduction is made as follows:

With patient lying on table 10 to 15 cc. of novocain are injected into one or both fractures. A stout belt of webbing is fastened to the wall and encircles the humerus just above the elbow joint for counter traction. The fracture is manipulated and forcible traction applied by an assistant. A bit of liquid glue applied on the fingers will assist the finger traction. A moulded plaster splint is applied as for supracondylar fractures. A second plaster splint is applied on the volar surface from the elbow to the wrist. If both bones are broken two pencils or similar wooden cylinders 5 to 6 inches long are pressed into the soft plaster in the interosseous space on either side of the forearm to keep the bones apart. A starch bandage is applied over all. Traction must be maintained until the plaster is set.

Splintage should be kept up for 6 to 8 weeks. The fingers and shoulder are actively exercised from the start.

FRACTURES OF THE LOWER END OF THE RADIUS (COLLES'S)

Novocain injections must be made on both extensor and flexor surfaces. If the styloid is fractured inject there also. The reduction is made again by manipulation and traction as described.

A moulded plaster splint is prepared from elbow to knuckles. A wet starch bandage is then applied. The wrist is held in the same axis as the forearm until plaster is firm. Three weeks splintage is required during which time the fingers, elbow, and shoulder are kept in motion. Swelling distal to the splint must be carefully watched. It is best to observe patient in hospital for a day. After a few days, exercise may be carried out with vigor and even light work as patient sees fit, using the projecting fingers and thumb.

WRIST FRACTURES

Extirpation of the semilunar bone and fragments of the scaphoid is usually followed by a weak and painful wrist. The operation is therefor never done except in longstanding cases.

The semilunar is always dislocated volarwards and reduction is easily done within a day or two by using the same traction and countertraction described for forearm frac-

Fig. 7. Iron stirrup in cast for walking.

tures, the operator pressing the bone back into place. The splint is applied as for Colles's fracture. Exercise is precisely the same. Scaphoid fractures usually require 6 weeks splintage, semilunar cases 3 weeks. The patient should be at work 2 to 3 weeks afterward.

METACARPAL FRACTURES

A simple ingenious splint is used for fractures of the metacarpals and phalanges. It is made out of soft wire 24 inches long and one-eighth inch thick, bent double from end of finger to the wrist where it is bent again to form two wings. (Fig. 8.)

Local anesthesia is injected. The splint is covered with cotton wadding and gauze bandage, and fastened to the palmar surface of the hand as shown. A posterior plaster splint extends from the elbow to the knuckles with the hand in about 30 degrees of dorsiflexion. The proximal end of the splint is fastened to the wrist and splint by a few turns of plaster or starch bandage. The distal end is fixed to the terminal phalanx with adhesive plaster. Reduction is now easily accomplished by bending the wire so as to flex the middle and end finger joints while the metacarpo-phalangeal joint is kept

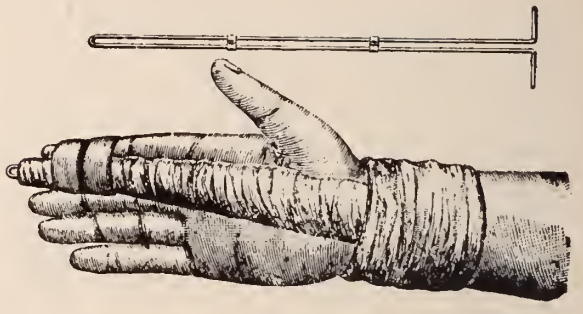

Fig. 8.

straight. Bending of the wire simply exerts a traction effect. The uninvolved fingers are exercised.

FINGER FRACTURES

Straight splints should not be used in fractures of the proximal phalanges as there is a displacement of the fragments palmwards. The same splint just described is used except that the three finger joints are flexed at 45 degree angles. The same splint and treatment is used for middle phalanx. Three weeks splintage is required.

The extensor tendon inserts on the dorsal part of the terminal phalanx. In fracture at this point the proximal joint is placed in extension, the mid joint flexed 90 degrees, and the distal joint hyperextended. The splint is used for three weeks.

Intradural Caudal Anesthesia in Cystoscopy and Other Intra-Urethral Manipulations

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In the examination and treatment of any group of urologic patients there will be a certain percentage who will require complete anesthesia of the urethra and bladder.

Before the introduction of epidural caudal and sacral anesthesia, the urologist had his choice of local anesthesia by means of the topical application of cocain and other anesthetics to the urethra or by some method of general anesthesia.

The use of local anesthesia in the urethra is successful to a certain degree permitting satisfactory cystoscopic and other manipulations. Cocain is the only drug which will produce satisfactory anesthesia by topical application to the urethra. It is not without its dangers; in my hands the reactions from its use have been more numerous and more disconcerting than reactions from epidural caudal, sacral and spinal anesthesia.

General anesthesia by means of ether and nitrous oxide oxygen have a limited field of application. Ether is given by the drop method for infants and children, but it has no place for elderly patients. We have used nitrous oxide and oxygen chiefly in those cases where it is desirable to abolish consciousness rather than to produce real anal-

gesia. If general anesthesia is used where analagesia and relaxation are required, a deep narcosis is necessary. The patient, of course, must be hospitalized and in many instances the period of recovery from the anesthetic is out of proportion to the urologic manipulation which was performed.

Caudal and sacral anesthesia have no equal when it becomes necessary to examine a patient with a contracted bladder from tuberculosis of the urinary tract, intramural cystitis, to fulgurate a tumor of the bladder or to implant radium in a tumor through the operating cystoscope. In these cases analgesia and relaxation are necessary for the proper performance of these examinations and treatments and for the added comfort to the operator from the ease with which they are performed.

We have seen patients refuse to have a repetition of a cystoscopy when dilatation of a ureter to facilitate the passage of a calculus was being performed. Instead the patient chose open operation for the removal of the calculus and he would instill this fear of cystoscopic examination in the minds of others so that many times patients refuse the initial cystoscopy for diagnosis.

The patient, who has had a cystoscopic examination by an operator not properly trained, will in most instances experience great pain and discomfort; later these patients refuse another cystoscopy when it becomes necessary to have competent urologic study of their cases.

As the anesthesia produced by the intradural caudal and that of the epidural caudal is the same, the only difference being the technic of induction in the two methods, we shall briefly review the history of the application of epidural caudal anesthesia.

With the introduction of epidural caudal anesthesia by Cathelin in 1901 and the subsequent improvement and developments in drugs and technic, a safe and reliable method of block anesthesia was available to the urologists. Cathelin's work was experimental on dogs. Staeckel in 1909 produced sacral anesthesia in human beings, he used it chiefly in obstetrics; the method was popularized by Labat and in 1916 Lewis and Bartels reported their experience with this type of

Fig. 1. Shaded area shows extent of anesthesia produced by sacral block. The introduction of nine needles is necessary to produce the anesthesia.

anesthesia in genito-urinary surgery and especially recommended its use in cystoscopic manipulations. In 1921 Scholl reported its use in urology and especially recommended it for cystoscopy and other endovesical manipulations. Young, Berry, Shaw and Davis report the use of epidural caudal and sacral block anesthesia for perineal prostatectomy and other operations through the perineum. It is the consensus of opinion of these authors that this type of anesthesia is the anesthesia of choice.

ANATOMY AND PHYSIOLOGY

The genital organs and bladder receive their nerve supply through the sacral nerves chiefly the pudic. The sacral nerves arise from the fibers of the cauda and pass through the sacral canal and sacral foramina. The sacral canal is the downward extension of the spinal canal but the closure of the dural sac opposite the second sacral segment separates the two canals.

Epidural caudal anesthesia is produced by depositing the anesthetic solution in the sacral canal, the needle having been introduced through the sacral hiatus. Should the anesthesia produced not be extensive enough or unilateral, it is supplemented by the blocking of the sacral nerves on either or both sides by injecting the anesthetic agent around the nerves in the sacral foramina. (Fig. 1).

The technic of epidural caudal injection through the sacral hiatus and the injection of the sacral nerves in their foramina requires a certain degree of skill. Due to anatomical variations of the sacrum in some individuals the insertion of a needle into the

sacral canal is impossible. Reactions with this method occur and are usually due to the injection of the drug into the general circulation as the sacral canal is lined with a plexus of veins; unless strict attention is paid to aspiration in the technic of this injection, these reactions occur quite frequently and are at times most disconcerting.

Because of the inapplicability of the epidural caudal method in some cases, we attempted to limit spinal anesthesia to the cauda by adding glucose to the spinal fluid in which we dissolved novocain crystals, thereby producing a heavy solution which would drop to the tip of the dural sac; the use of glucose in spinal anesthesia was first suggested by Barker.

Risacher and Waitz in France for obstetrical cases produced intradural caudal anesthesia with concentrated solutions of novocain. Pitkin and McCormack in this country report on the use of glucose and later gliadin added to the novocain solution to produce intradural caudal anesthesia. After many variations in the technic the use of glucose was abandoned and the technic we now use is as follows:

The patient is placed on his side in position for a lumbar puncture with the table in 10 degree Fowler position. The field is prepared as for any surgical procedure. The tap is made through the lowest possible interspace, using a 22 gauge lumbar puncture needle with a 45° bevel tip. A definite snap is felt as the needle pierces the dura. When the stylet is withdrawn and the first drop of fluid is seen welling up in the hub of the needle, 2 2cc. Luer-Lok syringe is quickly attached and from ½ to ¾ cc. of fluid withdrawn. The syringe is detached, the stylet replaced and from 50 to 100 mgs. of novocain crystals (Metz) dissolved in the spinal fluid. The fluid is slowly reinjected and the patient turned on his back. By using a 22 gauge needle the above maneuvers are possible without the loss of more than 1 drop of spinal fluid. The patient is left in Fowler's position for fifteen minutes which allows for fixation of the novocain in the caudal nerve fibers after which the patient can be placed in any position. The patient is prepared for cystoscopy, anesthesia is complete in from three to five minutes. By using this technic we have produced typical caudal anesthesia in 100 cases on all types of cystoscopic and endovesical manipulations. There have been no failures and no reactions. The duration of anesthesia has been from one to three hours. Through error one patient was put in a horizontal position so that anesthesia extended to the umbilicus and involved the legs. (Figs. 2 and 3).

POSTOPERATIVE COMPLICATIONS AND SEQUELLAE

In a few of the early cases headache followed which we felt was due to the use of glucose; after discontinuing its use we have had no complications or sequellae of any kind.

While this paper is concerned chiefly with this method of anesthesia in cystoscopic manipulations, intradural caudal anesthesia has been used in the surgical section of our Clinic on all types of operations on the external genitals, perineum, anus and rectum.

CONCLUSIONS

(1) It should be the aim of urologists to make cystoscopic examinations and all operative procedures through the cystoscope as painless as possible, better coöperation is obtained both from the patient and general physicians.

(2) Caudal anesthesia produces sufficient relaxation of the bladder for complete cystoscopic examination and treatment in all types of cases, the operative procedures being painless and the work of the operator greatly facilitated.

(3) The method of intradural caudal anesthesia is recommended because of its simplicity and reliability; by a single intradural injection complete sacral block anesthesia can be produced, whereas, by the other technic the introduction of nine needles would be necessary.

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Hematuria; A Clinical Study

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The reaction of the individual to pain and hemorrhage is practically identical. Immediate relief is desired. In the case of pain, however, the cause is usually sought for and corrected when possible; whereas in the case of hemorrhage, which is usually transitory, the patient's anxiety ceases with the cessation of the hemorrhage. Unfortunately, this point of view is generally held regarding hemorrhage from the urinary tract. To properly attack the problem of hematuria, the hemorrhage alone must not be treated but the underlying etiological factor must be sought and appropriate treatment directed toward it. Hematuria then will be placed in the same position as pain.

No more outstanding signal of danger is supplied the human being than the presence of blood in the urine, and when this fact is fully recognized by the patient and physician much grief will be avoided. To regard hematuria as a disease and not as a symptom of a disease is an error too frequently made by physicians as well as patients.

This study was not undertaken with the expectation of revealing new and startling facts but rather to call the attention of the profession to facts that have long been known but for which, from time to time, the proper respect is lost.

This series of cases was found in the last 550 consecutive cystoscopies done at the Wisconsin General Hospital. Of this number, 83 or 15% were examined because of blood in the urine. We believe this to be about the average for any urological service.

The youngest patient examined was seven years old, and the oldest was seventy-two. The age incidence for the eighty-three patients is shown in the following:

0–10 years	2
10–12 "	12
20–30 "	10
30–40 "	15
40–50 "	16
50–60 "	13
60–70 "	12
70 or above	3

From this incidence it is readily seen that the symptom is not particularly limited to any age period. The two extremes of life are the low points, as would be expected.

Of particular importance is the length of time between the examination and the first appearance of blood in the urine. Obviously, early diagnosis is urgent in any progressive lesion, and most of the lesions causing hematuria are progressive. Less than 10% of the patients came for examination during the first week, or, in other words, during the first attack of hematuria. This time element occupies a more significant position in the tumor cases, if a cure is to be obtained. There were 16 bladder tumors. The average duration of hematuria in these cases was 6.1

months. This fact explains why we see so few tumors when they are small and amenable to less drastic therapy with correspondingly better prognosis.

The shortest duration was one day, and the longest was nineteen years. The relative time periods are shown in the following:

1st week	7
2nd to 4th week	15
1st " 4th month	22
4th " 10th "	10
1st " 2nd years	8
2nd " 4th "	5
4 years or longer	6

Why do these patients fail to seek relief at an earlier time? Unfortunately, in some instances the fault lies with the doctor as well as with the patient. Treatment should never be instituted until the underlying cause is ascertained. The patient's fears are allayed once the urine clears, and without much urging he will dismiss the matter from his mind. Another factor is failure to see the bloody urine when it first occurs; this happens more often in women than in men, as the blood may be regarded as coming from the vagina. We are not justified in waiting to see whether the blood recurs or not, for the intervals may be quite long. In this series, eight patients had not seen the blood but it had been discovered by the doctor. Of these eight patients, all but one were found to have a major condition. This fact emphasizes the responsibility of the physician when microscopic blood is found in the urine. The logical time for examination is while the bleeding is going on —not after it ceases.

The blood was graded I, II, III, and IV—according to whether the urine showed an occasional, few, many, or very many red blood cells. Twenty-eight patients had blood III or IV in the urine; of this number three showed what might be considered minor conditions:

14 bladder tumors	1 urethral stricture
1 bladder stone	1 acute hemorrhagic nephritis
2 renal tuberculosis	1 essential hematuria
1 renal stone	1 rupture of the kidney
2 hypernephroma	1 polycystic kidney
1 carcinoma of the urethra	1 carcinoma of the prostate
1 hydronephrosis	

Forty-one patients showed blood I or II, as follows:

9 pyelonephritis	1 urethral stricture
6 renal tuberculosis	3 renal stone
3 bladder stones	1 prostatic hypertrophy
4 acute cystitis	2 cause undetermined
1 urethral caruncle	1 prostatitis
4 hydronephrosis	2 bladder tumor
2 ureteral stone	1 essential hematuria

Fourteen patients showed no blood in the urine at the time of the examination but gave a history of hematuria. The diagnoses in these were:

2 prostatic hypertrophy	1 prostatitis
6 pyelonephritis	2 renal stone
3 normal	1 cystitis

In this series of 83 cases, 19 different diagnoses were made. The most frequent condition found was tumor of the bladder (16) and the next most frequent was pyelonephritis (15).

CONCLUSIONS

1. Hematuria may occur at any age, more often from 30–60 years—rarely in very young or very old persons.
2. Less than 10% of patients seek appropriate examination of the urinary tract during the first attack of hematuria.
3. Hematuria is practically always indicative of serious diseases of the urinary tract.
4. Microscopic blood in the urine should not be disregarded.
5. Hematuria is usually intermittent.
6. The most common condition causing hematuria in this series of cases was tumor of the bladder.

MEDICAL BOARD MEETS

In a special meeting to select an investigator, the State Board of Medical Examiners will meet at the Hotel Loraine on Wednesday and Thursday, September 11th and 12th. Pursuant to authority granted by the present legislative session, the Board is expected to select a special investigator at this meeting who will work for the Board during the coming two years to uncover and secure prosecution of quackery and fraud in the field of treating the sick.

Applications for reciprocity will also be acted upon at this meeting of the Board.

THE JOURNAL CLINIC

Pellagra in Wisconsin; Case Reports*

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The occurrence of pellagra in the northern states continues to be of more than passing interest. The case reported by McIntosh and Blount (1) was the seventh to be published in this journal. The authors wish to add to this list five cases which have occurred since the report by physicians above mentioned. Four cases will be briefly described.

Case I, M. H., female age 33, resident of Wisconsin, referred to the medical service of the Wisconsin General Hospital July 27, 1926, by Dr. H. P. Bowen of Watertown. This woman's complaints had been of a year's duration and consisted of weakness, frequent recurring spells of nausea, vomiting and diarrhea accompanied by a burning sensation of the tongue. Of lesser frequence were headaches and dizziness. Gradually her appetite had deserted her and a weight loss of 26 pounds had occurred. Menstrual dysfunction was of recent event. Her diet was reported as being extremely inadequate.

Physical examination revealed little of significance except undernutrition, tremor of fingers and bilaterally symmetrical pigmentation over the forearms and legs. The pellagra picture was complicated by generalized arteriosclerosis with myocarditis and relative mitral insufficiency. Findings ascribed to dietary insufficiency were red "beefy" tongue, achlorhydria, marked secondary anemia, (admission count: hemoglobin 35%, red blood cells 2,140,000, white blood cells 4,800, 57% neutrophiles), impairment of some of the intellectual faculties, sensory changes, motor irritability, and yellowish color of the skin in general with deep brown-yellow symmetrical glove-like pigmentation. The blood picture at times approached that of pernicious anemia. The van den Bergh reaction and the icteric index did not favor a diagnosis of pernicious anemia. Because of the anemia, however, she was placed on a Minot diet. Improvement was not as prompt as in pernicious anemia; however she improved slowly and after 285 hospital days, she was discharged with general physical and mental restoration. Her frequent attacks of diarrhea had ceased and her blood count was as follows: hemoglobin 75%, red blood cells 4,980,000, white blood cells 11,800, neutrophiles 70%.

Case III, M. D., female age 52, resident of Wisconsin, referred to the dermatological service of the Wisconsin General Hospital by Dr. Fred Welch of Janesville, June 26, 1928. This patient came to the hospital because of her skin lesions which were of a month's duration and more acute than those seen in the previous two cases. However, she complained of neuritic symptoms the duration of which was 2½ years. During this period she had had numerous attacks of nausea, diarrhea and cramp-like pains in the lower abdomen. Blurring vision of one year's duration, constant tinnitus of two months' duration and failing memory for one month were among her other complaints. The skin manifestations first appeared as sunburn-like lesions over the dorsum of the hands and forearms. Scaling and pigmentation followed. A week before admission the same red-

Fig. 1. Case I—M. H. Showing pellagrous pigmentation. Note symmetrical configuration.

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ness accompanied by a burning sensation appeared on the face and neck. She claimed to be a vegetarian.

The findings were as follows: Achlorhydria, secondary anemia (hemoglobin 60%, red blood cells 3,740,000, white blood cells 7,100, neutrophiles 74%), bilaterally symmetrical dry scaling pigmentation over the dorsum of the hands extending to the elbows, scaling erythematous dermatitis with pigmented border about the neck (Casal's collar), absent tendon reflexes, tenderness of the calves of the legs, absent vibratory sense, swaying gait and a mental picture of dementia. This case was discharged with a diagnosis of pellagra to be treated by the referring physician.

Case IV, E. C., age 48, resident of Wisconsin referred to Department of Neuropsychiatry November 11, 1928 by Dr. R. G. Arveson of Frederic, who treated the patient during the onset of her illness and suggested the diagnosis of pellagra. This woman was sent in because of her melancholic state. She was conscious of a defect of memory for recent events, of restlessness and a peculiar feeling in the back of her head. She came to the hospital under protest; the county nurse gave us a more detailed account of her illness. The patient was under great tension for several months caring for an invalid husband who died in June 1928. She neglected herself and it was presumed that she ate very little and gave no thought to her own meals. The onset of her illness was marked by an erythematous skin lesion over the dorsum of the hands and arms accompanied by fever, delirium, and general debility. The nurse described her mental status at that time as one of confusion and despondency. Her physician was obliged to put casts on her arms to prevent her traumatizing them. She gradually recovered from the acute stage, but her despondency continued. The patient could not recall the events of her acute illness. Except for this amnesia, the case resembled involution melancholia. Catamenia had ceased 18 months previously preceded by "hot flashes" but with no mental disturbance. The bilaterally symmetrical pigmentation was typical of the pellagrous configuration and distribution. Treatment was instituted consisting of a high caloric well-balanced diet, iron and arsenic intramuscularly and the usual therapeutic measures for melancholia. She was improved but not completely restored when discharged December 23, 1928. Her weight had increased from 75 to 80 pounds.

Fig. 2. Case I—M. H. Showing distribution over legs.

Case V. The fifth case will be set forth in detail because it presented unusual features in many respects. A. M., age 39 years, was admitted on May 12, 1928, having no complaints. She was brought to the hospital by her brother who stated that for some time there were periods when she became mentally confused. She had taken morphine at one time for relief of asthmatic attacks and became habituated to the drug. The patient maintained, however, that she effected her own cure and had had no morphine for 6 years. On questioning it was revealed that her appetite had been poor and she had eaten little for some time (she was hazy for time relations and details), and had had two periods of nausea and vomiting during the three months previous to admission, had failed to menstruate for three months, had had difficulty walking because of ready fatigue for six months and more recently had noticed a difficulty in finding the words she wanted to use. She was a graduate pharmacist. From other sources it was learned that her husband had been out of work and that they had been reduced to want. They were living in a hotel, and her meals consisted of ordering a sandwich from the hotel kitchen when she felt the need of food. She had been having no meat, no fresh vegetables nor fruit.

On the 12th of May she weighed 115 pounds (height 5 ft. 3½ in.). Examination at this time revealed cloasmic brownish pigmentation over the face and hands and emaciation. Temperature was 98, pulse 88, respirations 16. On the 15th it was observed that she staggered and examination revealed the following significant findings: dilated unequal pupils, left pupil reacted poorly to light, all tendon reflexes exaggerated, right knee jerk greater than left, Babinski on right, weakness of left side of tongue, ataxia on test movements of legs and left arm, weakness of legs, speech thick and dysarthric, red tremulous tongue and mental confusion. Her temperature was 100, pulse 88, blood pressure 142/88, blood count: hemoglobin 70%, red blood

Fig. 3. Case 5—A. M. Cloasmic brown.

cells 3,890,000, white blood cells 10,800, neutrophiles 87%. The following day she was involuntary and speech had become more slurring. Her confusion increased and she was completely disoriented on the 18th, having fearful hallucinations and delusions of persecution. Motor agitation was marked: many purposeless choreiform movements, at times she picked at the bed clothes. For the next four days she was in a maniacal, delirious state with not more than a degree of fever. She thought on one occasion that she was in a hole in the "graveyard" and her nephew, husband and the undertaker were keeping her there. She escaped from them, running out into the hall, begging to be taken back to the hospital. She told the house physician that her husband's nephew and sister-in-law were shooting "wampoes" at her. The latter she described as short arrows which stick in the skin (hypodermic syringe ?).

During this period cerebrospinal syphilis was ruled out by negative serology. (Spinal fluid was normal.) Alcoholic psychosis was next considered. On May 23rd considerable blood was noted in stools, she had become semi-stuporous with generalized lead-pipe rigidity. Temperature was normal, but pulse was 100, blood pressure 124/88. She continued to be in a depressed but not so stuporous and negativistic state and June 1st a note was made that patient appeared demented and deteriorated. On June 7th it was noted that she was becoming more alert and much clearer. Her mental condition continued to improve. On June 11th attention was drawn to her acute skin condition (Figs. 3, 4, 5, 6). The pigmentation of face had become deeper, was still blotchy, but was absolutely symmetrical. Over the dorsum of hands the skin was deeply pigmented, much more intense over metacarpal-phalangeal joints and inter-phalangeal joints. Over the knuckles there was scaling and thickening and beneath the scales marked erythema. Over the elbows there was also deep brown scaling pigmentation with a red base. One elbow traumatized in a fall showed much more erythema than the other. A diagnosis of pellagra was now made. On the 16th, diarrhea commenced, mucous membranes became very red, especially the tongue, and signs of toxic myocarditis developed (rapid rate, poor muscular quality, blood pressure 96/66). On June 18th the typhoidal state became more severe, the abdomen had become distended and tympanitic, temperature 102, pulse 130, respirations 28, blood pressure 94/60. On the 22nd she became dyspnoeic, pulse was weak; extreme anorexia and depression prevailed. Her life was despaired of for a few days. Then improvement began and signs of toxicity gradually diminished. The pigmentation was fading and the patient was sitting up in bed, when she suffered a relapse on July 7th,—fever (103°), diarrhea, tachycardia, tympanites recurred. For the next three weeks there were 4–8 daily bowel movements; however other symptoms were abating. On July 27th she complained of paresthesias, numbness and muscular cramps in the lower extremities. This was followed by tenderness of the muscles, weakness of the leg muscles and extensors of the arms and impairment of tactile sensation below the knees. From this state she gradually improved until her discharge September 30, 1928. Her blood count had varied considerably—hemoglobin reached a level of 50, the lowest red count was 3,300,000, and the white blood cells ranged from 2,800 to 12,700. Gastric analysis showed an achlorhydria. At the height of the disease the urine was of low specific gravity and albumin was noted. On July 12th the gold sol curve which was negative at the onset was 0012221000. Her weight dropped from 115 to 105 pounds. She lost almost all her hair late in the disease.

This case is given in detail because it presents almost all the complications of pellagra not usually seen in one case. It is also unusual for an individual to survive the typhoidal state which is only another indication of extreme toxicity. It is also of interest that the period of acute psychosis preceded the severe systemic reaction while during the typhoidal stage she was relatively clear, becoming confused at night occasionally. It is notable also, that 3 weeks elapsed before the skin lesion developed its typical pellagrous characteristics, making diagnosis delayed.

Three of the four cases showed mental disturbance. Cooper (2) in a recent publication states that 4–10% of pellagrins develop psychosis but that there is no mental symp-

Fig. 4. Case 5—A. M. Note line of demarcation.

tom complex typical of the disease. Lorenz (3) as special expert for the U. S. P. H. S. in 1916 made a study of the mental disturbance in pellagrins in an effort to classify the psychosis. It was his impression that if all the mild types of aberration were included there would be reported a higher percentage of cases showing psychotic manifestations. He described cases under the following headings: (1) neurasthenia, (2) confused types, (3) delirious types (as seen in case 5 of authors' series), (4) anxiety psychosis (see case 4), (5) pellagra manifestations in already established psychosis, (6) dementia or terminal conditions (case II?). The one symptom seen in common in all types of psychoses is a disturbance of consciousness seen especially in two of the authors' cases. It was especially noted in the cases depicted here that reliance could not be placed in the anamnesis as given by the patient because of a haziness in time relations and a more or less amnesia for the smaller details of the illness. This is well illustrated by E. C. who, except for this one detail, presented a typical case of involution melancholia, and A. M., who could give us no details concerning the onset of the disease could not tell the articles of her diet—only knew that her meals had consisted of light lunches. Lorenz in attempting to compare the pellagrous psychosis with known psychoses felt sure its origin was toxic-chemical in origin and likened it to the psychosis of alcoholism. During the stage of acute mental manifestations, the case of A. M. resembled very much delirium tremens with its disorientation, hallucinations, delusions of persecution arising from fearful visual sights, and extreme motor agitation. The subsequent toxic systemic reactions of A. M. (gastroenteritis with peritoneal irritation, myocarditis and peripheral neuritis) bear out the toxic theory of origin.

The result of years of investigation into the etiology of this most interesting disease will stand forever as a monument to the memory of Goldberger (4). He has shown that pellagra is the result of faulty inadequate diet. He pointed out that the factors resulting in this inadequacy were largely economic. He has shown that the "pellagra-preventive" vitamins is present in nearly all natural foods, being found in higher percentages in yeast and lean meat and to lesser extent in milk, vegetables, fruit and eggs.

TREATMENT

As a result of the work of Goldberger and his co-workers treatment resolves itself into a dietary problem. The first consideration is a diet rich in the "P-P" factor. To insure this, yeast, milk, lean meat (fresh meat juice, scraped beef) egg yolk and tomato-juice (fresh or canned) should be included in the diet. To make up for loss in weight (to the point of extreme emaciation in many cases) a high caloric diet, five meals preferred to 3, is also advisable. For the milder cases with-

Fig. 5. Case 5—A. M. Pellagrous pigmentation of hands.

Fig. 6. Case 5—A. M. Distribution and Configuration of skin lesion hands and arms.

out severe gastro-intestinal disturbance, diet alone is the only therapy. However, when severe systemic manifestations occur, symptomatic drug therapy is indicated. To control excessive watery diarrhea with pain and tenesmus, tincture of opium, belladonna, tannigen and bland powders (calcium carbonate and bismuth subcarbonate āā gr. XXX q.i.d.) should be given. Digitalis may be indicated to support the heart and proper heat measures for the neuritic manifestations. A. M. of this series required all of these measures.

The cases above, as well as case reports in the literature, show that pellagra may become a chronic disease due to faulty diet, that dietary indiscretion may result in exacerbations of acute manifestations of the disease. Therefore, cases of acute or subacute pellagra should not be regarded as cured following subsidence of more or less acute symptoms. They should be regarded as potential pellagrins and should be educated concerning the causes of the disease and its dietary control. In addition to urging a well balanced menu it is suggested that brewers or bakers yeast as well as milk be included in the daily rations.

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Heart Rate During Sleep

The tremendous variability of the normal heart rate, as well as its marked reduction and relative stability during sleep, have been demonstrated by ERNST P. BOAS, New York, and MORRIS M. WEISS, Louisville, Ky. (*Journal A. M. A.*, June 29, 1929). In exophthalmic goiter, in the presence of cardiac insufficiency, of active myocarditis, and at times of mitral stenosis, the drop in rate during sleep is greatly diminished. This may serve as a valuable aid in diagnosis, particularly since patients with neurogenic tachycardia, whose condition may often be confused with one of these disorders, show a decided lowering of heart rate during sleep. Patients with auricular fibrillation show a marked instability of ventricular rate, and the observations suggest that neurogenic factors are of great importance in determining the ventricular rate in certain of them. These neurogenic factors in the tachycardia of auricular fibrillation cannot be controlled by digitalis alone.

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EDITORIALS

"BREAKING AWAY"

OSLER in his lecture on the value of medical societies declared that there were two classes of physicians that evoked his sympathy,—those who felt that the program contained nothing of interest, and the forty visit a day man who never had time.

These two classes will ever exist, but should not be found within the ranks of membership. Real membership means participation and annual meeting time presents this opportunity.

We hope that the great majority of our readers will attend the meeting in Madison. The program covers a wide field of subject matter. It contains much of interest and value to all and with it time has been allowed for relaxation and good fellowship. Your friends look forward to seeing you at Madison. Be there if you have to "break away" to do it.

MARTYR TO SCIENCE

"THERE are men and classes of men that stand above the common herd. The soldier, the sailor, the shepherd not infrequently,—the artist rarely,—rarelier still the clergyman,—the physician almost as a rule."—R. L. Stevenson.

And among the physicians there are those who stand out as truly great—those true scientists whose lives are spent in the laboratory and in the field, delving for and bringing to the surface the hidden truths so that you and I may give to our patients the benefits of their labors. Men who, when duty calls, do not hesitate to give their all in order that their fellowmen may live. Heroes in the true sense of the word. Jesse W. Lazear belonged to this group; Adrian Stokes, Hideyo Noguchi, William Young, Alfred Wakeman likewise made the supreme sacrifice, and so did Paul A. Lewis.

Dr. Lewis was born in Chicago, but was truly a Wisconsin boy. He attended the South Side High School, University of Wisconsin and the Wisconsin College of Physicians and Surgeons. He received the degree of Doctor of Medicine from the University of Pennsylvania in 1904. In 1905 and 1906 he was the Austin Teaching Fellow in Comparative Pathology at Harvard University Medical School and for two years thereafter was Associate in Pathology in the Rockefeller Institute for Medical Research. From 1910 to 1923 Dr. Lewis served as director of the laboratory of the Henry Phipps Institute of the University of Pennsylvania. In 1923 he joined the Rockefeller group at Princeton, N. J. As a member of the Rockefeller Foundation he left in January, 1929 for Brazil, in the hope of finding a more efficient method of preventing yellow fever than is now known. A few weeks before he was due to return home Dr. Lewis contracted yellow fever, and died on June 30.

Dr. Lewis is survived by his wife, the former Louise Durbin of Milwaukee, and two children. His father, Dr. Charles Lewis, and his sister, Dr. Marian Lewis, are practicing medicine at 1159 Kinnickinnic Ave., Milwaukee. O. L.

GENUS, HOMO SAPIENS-SPECIES, GENERAL PRACTITIONER

WITH the ever changing standards of medical practice and the rapid metamorphosis in social and community life, both the medical press and lay magazines are constantly lamenting or condoning the disappearance from our midst of the old-time general practitioner, that self-effacing, untiring family physician, counselor and friend; the man who helped us into the world, nursed us through the contagious diseases, set our broken bones and sewed up our heads, gave us his blessing when we were married and mayhap was still active and alert when the next generation arrived.

This type of practitioner, we are told, has gone and the surgeon, the obstetrician, the gynecologist, the eye, ear, nose and throat man, and a host of others have supplanted him; not to mention that specialty which is the ambition of many a tired saint in medicine, the skin man, described as the one who never kills, never cures and is never called out at night.

Now who is it that inspires this lament for the dead? It is the city dweller and the specialist himself. Are there not still practicing in this broad land 50,000 rural physicians? Is their opportunity less than it was a generation ago? Is their field of usefulness greatly changed—only its dimensions. The automobile enables him to cover five times the territory and do five times the amount of work and receive five times as much for it.

To be sure in particular cases, the automobile at some seasons of the year enables him to rush his patient to a hospital or obtain the skilled help that formerly was impossible, but there are still left to his skill and judgment whole families to watch over, to learn to know and to love. There are hundreds of communities in need of the old type general practitioner—wiser, yes,—better equipped, yes—far better; with a wider vision of the newer preventive medicine and health prevention.

Many of us haven't made the adjustment, we are too old. Let the young man step in. The harvest will be rich and the rewards great to him who wavers not in his fealty to the ideals of the profession or him who "follows the gleam." The Sheldon Prize awaits an answer.*

FOLLOW THROUGH

AS DOCTORS, most of us are interested in acute ailments, be they due to infection, intoxication, or degeneration. It is the emergency which appeals to the patient as well as to the physician. Frequently the chronic case is allowed to drift away from active observation. This is regrettable. The patient is without necessary medical attention. The physician is not receiving financial reward for honest services rendered.

The thought expressed, applies especially to heart patients. They receive honest care and every attention while they are acutely ill, perhaps decompensated. Gradual recovery, with less frequent medical observation follows. They are lost from sight, to reappear, again decompensated. How much suffering might have been avoided had the patient been observed from time to time subsequent to his apparent recovery!

Let us remember, once a heart with structural defect, always a heart breakdown on the horizon. Can't we instill into our patients the thought that in consulting their physicians they are paying for health insurance instead of monthly visits to our offices?

Do not wait for the emergency—keep track of your heart patients. *M. F. R.*

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* The Sheldon prize of $100 will be awarded on the first of the year to that member or senior medical student who submits to the Society the best essay on "How Shall the General Practitioner Best Increase His Usefulness." Rules for the contest will be found in this Journal for March, 1929.

THE PRESIDENT'S PAGE

THE MADISON MEETING

WHOEVER is interested in medicine and surgery will look forward to the coming State Meeting at Madison with a great deal of interest. One occasionally hears the opinion expressed that these meetings are pretty much alike. This, of course, will appear to be so only to the superficial observer. They are never alike, for every meeting of our State Society has had characteristics peculiar to itself, has had someone's ideas woven into it, which goes through the entire program like a colored thread through a web of some kind.

The aims of the program this year are twofold. One purposes to present an unusually large number of papers on a variety of subjects, so that there may be an opportunity for each visiting member of this society to find and select something in this program that he is especially interested in. If he does, he will go home satisfied and his knowledge on this particular subject will be broadened, his interest deepened.

The other aim is to bring out more and freer discussion of the papers presented. Nothing is more discouraging to the essayist than have his paper fall flat; i. e., not arouse any enthusiasm or interest. A mere courteous reception is discouraging to the writer, while a lively discussion is his reward and a stimulus to future efforts. On the other hand, it is not necessarily true because no, or but a limited, discussion follows the reading of a paper that the value of the essay has not been appreciated. More often insufficient discussion is due to modesty or timidity on the part of listeners who really could discuss the paper and add something of real value.

Fluent speaking and connected thinking, while on your feet, is an art that has to be learned. One must feel at home in the surroundings if he would do his best. I well remember an incident when Doctor Harris of Chicago, then President of the A. M. A., was addressing an assemblage, standing in front of and on the same floor-level with the audience. A gentleman in the front row, quite properly thinking it would be better if Doctor Harris spoke from the elevated platform, took hold of him and led the mildly resisting doctor onto the platform. Doctor Harris smiled uncomfortably, thanked his friend for his effort and lingered a moment or two. Then he left the platform, returned to the floor and delivered a most delightful address from the place that was comfortable to him and where he felt at home.

Not everybody is gifted with the ability to get up before a large audience and discuss a subject fluently and to express himself in a way that is satisfactory to himself. Afterward there often recurs to our mind so much that we had wanted to say but failed to do, thoughts that would have made our statement much more convincing and our point much clearer. Often we realize that the important thing we had started out to say has been forgotten entirely. A semi-embarrassment before a large audience is frequently responsible for this.

Now, it occurred to the program committee that besides the large meetings in the forenoon, and for the purpose of encouraging more extensive discussion, a series of smaller meetings could be arranged for in the afternoon, during which it might seem easier for a good many of us to get up and discuss a paper or to ask questions as you would in ordinary conversation. These smaller meetings have been arranged for and will occupy the afternoon of two days.

The program committee, with Dr. W. G. Sexton as its chairman, seriously and anxiously hope that their plan will work out successfully and that lively and numerous discussions will be the reward for all essayists from in, as well as from out of the State.

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SOCIETY PROCEEDINGS

JEFFERSON

The members of the Jefferson County Medical Society met on Thursday evening, July 25th, at Lake Mills. The meeting was well attended.

KENOSHA

Dr. Helen A. Binnie, who was injured in a motor accident several months ago, and who has now fully recovered, was welcomed back to her post as president of the Kenosha County Medical Society at a luncheon meeting of that organization at the Elks' Club, Kenosha, on Thursday noon, July 25th.

Dr. Margaret Pirsch, secretary of the society, who sustained a spinal injury during the same accident, will resume her work in September.

Dr. Albert Bryan, Madison, addressed the members at the luncheon, having chosen for his subject, "Encephalitis". Twenty-four physicians attended the luncheon meeting.

PIERCE–ST. CROIX

The regular monthly meeting of the Pierce–St. Croix Counties Medical Society was held at Amery on July 17th. Following a six-thirty dinner at Bungalow Beach the scientific program was presented at the high school auditorium. Dr. Alexis Hartmann, Washington University, St. Louis, Mo., spoke on "Infant Feeding," this being part of the University Extension course on Pediatrics. "The Differential Diagnosis of Cardiac Diseases from Physical Findings," was the subject of the paper presented by Dr. Chester Kurtz, Madison. Dr. R. C. Buerki, superintendent of the Wisconsin General Hospital, gave a short informal talk on the work that is being done at the hospital. An active and interesting discussion ensued.

Those present at the meeting were: Dr. J. L. Livingstone, Hudson; Dr. T. T. Skogen, Hudson; Dr. S. G. Phaneuf, Somerset; Dr. Harry Perrin, Star Prairie; Dr. A. E. McMahon, Glenwood City; Dr. B. Kunny, Baldwin; Dr. Julius Blom, Woodville; Dr. E. L. Boothby, Hammond; Dr. J. H. Armstrong, New Richmond; Dr. O. H. Epley, New Richmond; Dr. A. E. Gendron, River Falls; Dr. G. M. Dill, Prescott; Dr. J. Travenick, Jr., Prescott; Dr. J. A. Riegel, St. Croix Falls; Dr. T. O. Ries, Luck; Dr. W. B. Cornwall and Dr. J. W. Prentice, Amery.

WALWORTH

Dr. C. A. Harper, secretary of the State Board of Health and Dr. W. F. Lorenz, Madison psychiatrist, addressed the monthly meeting of the Walworth County Medical Society held Tuesday evening, July 9th, at the Walworth County Hospital. Before the scientific meeting, a dinner was served the physicians and their wives. Dr. and Mrs. Frank W. Pope, Racine, and Dr. and Mrs. L. N. Hicks, Burlington, were honored guests of the society.

WAUPACA

The members of the Waupaca County Medical Society met at the residence of Dr. T. E. Loope, at Iola, on July 26th. A goodly number of members were in attendance and various topics of interest to the medical profession were discussed during the course of the evening. The next meeting of the society will be held at Manawa in September. A. M. C.

WINNEBAGO

About seventy-five members of the Winnebago County Medical Society gathered on July 18th and enjoyed a chicken dinner and get-together at Wolf Pines, near Fremont. The physicians and their wives were the guests of Dr. T. D. Smith and were entertained in the clubhouse built on the banks of the Wolf River. Speed boating, horseshoe, baseball and other games were enjoyed.

Following the dinner the Wisconsin Public Service Corporation demonstrated first aid with their uniform team of girls. Later the lawn was illuminated by colored lights and a bon fire. The guests were then given a moonlight ride on the river. W. N. L.

NINTH DISTRICT

The summer meeting of the Ninth District Medical Society was held at Wisconsin Rapids on August 1st. Dinner was served at the Hotel Witter at six-thirty after which the following program was presented: "Contagious Abortion," by Dr. W. D. Stovall, State Laboratory of Hygiene, Madison, and "The Present Status of the Problem of Puerperal Infection," by Dr. John W. Harris, State of Wisconsin General Hospital, Madison. J. F. S.

MARINETTE–FLORENCE

The Marinette–Florence County Medical Society held its monthly meeting Thursday evening, August 8th. Dr. Ralph Carter, of Green Bay, presented a very interesting paper on "The Treatment of Varicose Veins by Injection." Judge William F. Haase, Marinette, spoke on "The Medical Contact with the County Court." M. D. B.

ELEVENTH DISTRICT

Over one-half the membership of the Eleventh District attended its annual meeting held at Solon Springs on Monday, August 12th. Meetings in the forenoon and afternoon were held at the Cosgrove Hotel following which the members were the guests of Mr. and Mrs. Crownhart at their summer home for a buffet supper, entertainment, and the councilor

address of Dr. John M. Dodd, of Ashland. Dr. Fred G. Johnson, of Iron River, was elected president of the society for the ensuing year and Dr. I. E. Schiek, of Rhinelander, secretary. Meetings during the past three years have been held at Superior, Ashland and Solon Springs. It is planned to hold the 1930 meeting in Rhinelander.

Papers were presented by the following: Dr. F. S. Smyth, University of Wisconsin Extension Lecture; Dr. K. W. Doege, Marshfield, "The Desirability of a Scientific Secretary for the State Medical Society of Wisconsin"; Dr. C. R. Bardeen, Madison, "Keeping Up-to-date"; Dr. C. H. Davis, Milwaukee, "Practical Problems in Obstetrics and Gynecology"; Dr. R. C. Blankinship, Madison, "Present Day Methods of Diagnosis in Gastro-Intestinal Disorders"; Dr. Arthur Bratrud, Minneapolis, "Injection Treatment of Varicose Veins"; Dr. J. M. Dodd, Ashland, "Councilor Address", and Mr. George Crownhart, "Activities of the State Medical Society".

NEWS ITEMS AND PERSONALS

The MacCornack Clinic, Whitehall, announced recently that Dr. R. R. Richards, of Chetek, has joined the clinic staff and will devote his time to internal medicine.

Dr. Richards is a graduate of the University of Wisconsin and the Medical School of the University of Illinois. He served his interneship at the Ancker Hospital, St. Paul, and later spent one year in the department of internal medicine at the same hospital.

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Dr. L. J. Moriarty, Two Rivers, sailed for Europe July 30th on the Majestic. He will pursue a course in surgery at the University of Edinburgh, Scotland. Dr. Raymond R. Revard, of Oshkosh, will have charge of Dr. Moriarty's practice during his absence.

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A hospital has been opened at Poynette for the care of medical, surgical and obstetrical cases. The hospital has a well equipped operating and delivery room, x-ray room, laboratory and special room for fractures and emergency cases. It is non-sectarian and privately owned.

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Offices at Oakfield were opened recently by Dr. L. L. Taylor and Dr. F. H. Ferguson, physicians from the Waupun Clinic. The doctors will devote Tuesday and Thursday afternoons and evenings to their Oakfield practice.

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Dr. F. A. Davis, of the Davis and Neff Clinic, Madison, will present a paper at a meeting of the International Congress of Ophthalmology to be held at Amsterdam in the near future. He sailed from New York on Saturday, August 10th.

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Dr. L. W. Peterson, formerly of Tomahawk, has established his practice at Shawano. Dr. Peterson came to Tomahawk in 1925 shortly after his graduation from Rush Medical College, Chicago.

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A total of 1,974 physicians in Wisconsin have been granted permits to issue prescriptions of medicinal whisky in pint and half-pint quantities, up to July 1st, the federal prohibition bureau announced recently. Permits issued up to July 1st will be good for the current fiscal year, ending June 30, 1930.

Wisconsin ranked below the leaders in the scale of states holding the largest number of physicians' permits with New York, 14,026, Pennsylvania, 8,255, and Illinois, 7,462, topping the list. The total for the country was given as 70,329, as compared with 69,645 for the fiscal year ending June 30, 1929, 68,696 in 1928, and 48,097 in 1927.

A total of twenty-two states prohibit the issuance of permits for prescriptions and accordingly no permits are granted by the federal government in such states. In this group, made up largely of states of the west and south, which became bone dry before the federal law are: Alabama, Arizona, Arkansas, Delaware, Florida, Georgia, Idaho, Indiana, Kansas, Maine, Mississippi, Nebraska, New Mexico, North Carolina, Washington and West Virginia.

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Dr. and Mrs. C. W. Leonard, of Fond du Lac, returned the latter part of July from an extended tour of Europe and the British Isles.

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Dr. William O'Dwyer, of Avoca, has opened an office in the Davis Hotel at Ridgway. He plans to move his family to that city in the near future.

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Skin infections among bathers are reported this summer from many lake regions in Wisconsin, according to the State Board of Health. One of considerable prevalence is popularly known as "swimmer's itch," having the appearance of mosquito bites with pronounced redness around the eruptions.

The State Board of Health characterizes this infection as probably due to contact with the larvae of a species of snail present in the water. A similar outbreak in Minnesota last year was investigated from a scientific standpoint after practically the entire population of two young people's camps had been affected by the condition.

The solution is said to be complicated by the fact that should copper sulphate or some other chemical be used to treat the lake waters, the amount required to kill the offending parasite might prove deleterious to fish life.

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The Iola Hospital, the oldest active hospital in Waupaca county, will step into its own in the near future when it becomes the clinical headquarters for seven physicians in Waupaca and Portage counties. The new organization is the outgrowth of plans which have been developing for several months past.

Seven physicians have agreed to make the Iola Hospital their clinical headquarters hereafter. They include: Dr. A. R. Bellerue and Dr. T. E. Loope, of

Iola; Dr. C. A. Schlenker, Amherst; Dr. A. M. Christofferson, Waupaca; Dr. W. J. Irvine and Dr. R. K. Irvine of Manawa, and Dr. R. H. Dunn, of Rosholt. The hospital is very favorably situated in the center of the community to be served and is well equipped with modern apparatus and x-ray facilities.

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Dr. W. C. Kirsten, who has practiced medicine at Butternut for the past three years, will soon leave to return to Milwaukee where he was located previous to taking up his residence in Butternut.

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The boastful sign, "certified rooms," which tourists encounter on their trips along Wisconsin's highways, means nothing at all, the State Board of Health announces. Such advertising signs have no official significance, there being in Wisconsin no inspection of rooms or homes.

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Dr. Arthur Teitgen, Manitowoc, was named examining physician by the fire and police commission to succeed the late Dr. Max Staehle, who acted in that capacity for some years.

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Dr. A. M. Fichman, who has been practicing in Stevens Point for the past year, with offices in the Shafton building, left the latter part of July for Fort Wayne, Ind., where he will continue in his profession.

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Dr. J. O. Muehlhauser, formerly in charge of x-ray and laboratory work at St. Mary's Hospital, Green Bay, has returned to join the hospital staff. Dr. Muehlhauser served on the local hospital staff from 1924 to 1927, and for the past two years has been studying at the University of Wuerzburg, Bavaria, Germany.

In addition to his work on the hospital staff, Dr. Muehlhauser plans to practice in Green Bay, and has established offices at 205 North Washington Street.

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Dr. J. A. Hernandez, who has practiced his profession in Stratford for nearly three years, has now located in Athens, where he and his family will make their future home.

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Dr. Edward Blumer, of Monticello, is, as his name implies, a physician by vocation, but by avocation he is, first and last, a beekeeper. One might think that he follows this interesting side line because, after the strenuous experiences connected with his professional duties he finds an agreeable change in the peaceful and quiet security naturally associated with 130 colonies of busy and militant bees. The doctor makes no such claim but attributes his predilection for the little honey gatherers to tastes acquired in early life which, he believes, make him a living example of the forceful influence of early impressions.

Dr. John W. Towey, medical superintendent of Pinecrest Sanatorium at Powers, Michigan, was named president recently of the Michigan Sanatorium Association at the 1929 meeting of that organization held at Muskegon, Michigan. Dr. Towey is well known to Wisconsin physicians.

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Dr. E. A. Brzezinski, Milwaukee, has resigned as police surgeon and will pursue a post graduate course in medicine which would interfere with his duties in that capacity.

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At a recent meeting of the Plymouth Kiwanis Club, Dr. W. F. Zierath, of Sheboygan, a member of the board of trustees of Rocky Knoll Sanatorium, spoke on "The Tuberculosis Problem and the County Sanatorium." He traced the development of the fight against tuberculosis in Sheboygan county and gave a report as to the amount of money expended for that purpose.

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Dr. E. H. Lechtenberg, formerly resident physician and surgeon, Madison General Hospital, has become associated with Dr. J. C. Doolittle, of Lancaster. Both physicians will engage in general practice.

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Dr. F. P. Neis, Thorp, contracted pneumonia the latter part of July and was removed to St. Joseph's Hospital at Chippewa Falls on July 30th. Dr. A. H. Kulig, also of Thorp, has had charge of Dr. Neis' practice during his illness.

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Dr. C. J. Moran, opened offices in the Security Building, La Crosse, on August 1st. Dr. Moran is a graduate of Marquette University and served his interneship at St. Francis Hospital, La Crosse.

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The importance of the biological aspect of medicine was the subject of a talk given by Dr. E. A. McKenna, Antigo, at a recent Kiwanis Club luncheon at the Butterfield Hotel. Dr. McKenna gave a historical outline from the time of Pasteur, when he was employed as chemist by the French government in 1882.

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Dr. Mary P. Houck returned the latter part of July to La Crosse after an extended trip to the Pacific coast. She visited in Washington, Oregon and at Lake Louise, Vancouver, Canada.

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Dr. and Mrs. Eugene E. Neff, of Madison, spent several days in July at the Lawsonia Country Club on the shores of Green Lake.

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Dr. H. B. Wentz, physician at the state penitentiary at Waupun, was the speaker at a weekly session of the Ripon Rotary Club, held at the Shorewood Forest Hotel, Green Lake, the first week in August. Dr. Wentz, who formerly practiced medicine in Alaska, gave a very interesting account of his eight years' experience in that vicinity.

Dr. Francis J. Diamond, formerly of Elgin, Ill., has become associated in practice with Dr. W. F. O'Connor at Ladysmith. Dr. Diamond is a graduate of Loyola University School of Medicine, Chicago, in 1928.

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Dr. H. A. Sincock, Superior, and Dr. A. X. Kamm, Ashland, accompanied by several friends, enjoyed a trip on the yacht "Wajean" up to the point where the Nipigon empties into Lake Superior, at Nipigon Bay. The expedition lasted for about a week, with the crew fishing along the way.

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Among Wisconsin physicians who attended the Upper Peninsula Medical Society meeting at Ironwood, Michigan, during the month of August were: Dr. J. M. Dodd, Dr. C. O. Hertzman, Dr. C. J. Smiles and Dr. M. L. Young, all of Ashland.

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Dr. F. O. Brunckhorst, physician at Hortonville for many years, plans to establish his practice at Neenah in the near future.

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Dr. F. H. LeWohl, former city physician at Peshtigo, is now at Madison but plans to leave for Europe soon, where he will continue his studies.

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Another diploma and license mill, printing spurious certificates and state seals, was exposed recently. It is reported that counterfeit plates were made from photostatic copies of the originals and several Chicago printing and engraving firms were said to have been named. Diplomas of Rush Medical College, Northwestern University Medical School and the University of Wisconsin Medical School were forged, as well as interne's certificates from the Cook County (Chicago) Hospital, and Illinois state licenses and seals.

So thorough was the mill, that applicants without college education could purchase diplomas and state licenses, both apparently bona fide, to practice in Illinois and elsewhere. More than 1,000 fake licenses are said to have been sold for approximately $2,000 each, and diplomas at a still higher price.

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The following Wisconsin physicians are now doing post graduate work at the University of Vienna. Austria: Dr. Millard Tufts, Milwaukee; Dr. Malcolm Hipke, Milwaukee; Dr. Leon Guerin, Milwaukee; Dr. William Hipke, Marshfield, and Dr. J. E. Donnell, Cuba City.

Dr. E. L. Miloslavich, Milwaukee, is also in Vienna, making a study of new methods being used by the Vienna police organization in the detection of crime through the science of pathology and anatomy.

MARRIAGES

Dr. George H. Jamieson, Racine, to Miss Alice Dillon, Oshkosh, on July 18th at Oshkosh.

Dr. Laurence W. Gregory, Philadelphia, formerly of Valders, to Miss Madeline Gutleish, New York City, at New York on July 27th.

BIRTHS

Dr. and Mrs. R. L. MacCornack, Whitehall, have announced the arrival of a baby daughter, Irene Marguerite, on May 24th.

Dr. and Mrs. F. D. Geist, Madison, are the parents of a son born Tuesday, August 13th.

Dr. and Mrs. W. J. Bleckwenn, Madison, are the parents of a baby boy born Saturday, August 17th.

DEATHS

Dr. Charles H. Sutherland, Janesville, died on the evening of July 15th at his home after a severe illness of many months. Dr. Sutherland was born in Janesville on October 28, 1876. He graduated from Beloit College in 1895 and the University of Wisconsin in 1900. In 1903 he received his degree in medicine from the Chicago Homeopathic Medical College, interning at Cook County Hospital in 1903 and 1904. Since that time he has practiced continuously in Janesville, excepting the period spent in post graduate work at Northwestern University.

Dr. Sutherland served on the State Board of Health from 1910 to 1921 and was a member of the staff of Mercy Hospital, at Janesville. He was a past president and member of the Rock County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. Surviving him are his wife, a son and a daughter.

Dr. George N. Hidershide, Arcadia, died at the Winona General Hospital, Monday evening, July 22nd. Dr. Hidershide was born in Luxembourg, Germany, on June 13, 1850 and graduated from the Louisville Medical College, at Louisville, Ky., in 1875. He took post graduate courses at Rush Medical College, Chicago, and at the University of Vienna, Austria. The deceased established his practice at Arcadia in 1875, a few months after the railroad was built in the Trempealeau Valley. He continued this practice up until the time of his death, extending over a period of fifty-four years.

SOCIETY RECORDS

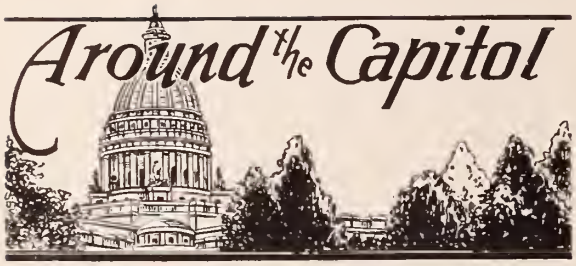
NEW MEMBERS

Stanff, Glenn R., Hilbert.

CHANGES IN ADDRESS

Foley, Charles F., Sparta, to Soldiers Grove.

Huston, John, Ann Arbor, Mich., to 1302 Wells Bldg., Milwaukee.



In an effort to check the increasing number of accidents in the state Gov. Kohler has signed the Buntin bill reducing the size of firecrackers and regulating the sale and use of fireworks. The bill prohibits the sale of explosive canes, boy pistols, firecrackers more than two inches long and other specified articles.

It also provides that fireworks displays may be held only on permits issued by the mayor, village president, township chairman, or Fourth of July commission, and subject to regulation by municipal officers.

* * *

The University of Wisconsin appropriation bill has been disposed of in the legislature with the passage of a measure calling for about $500,000 more than the bill passed at the last session.

* * *

Repeal of the state dry act will stand as the final achievements in the anti-prohibition drive at this session of the legislature. The question of having the state go into the liquor business by manufacturing and dispensing intoxicating beverages was turned down by the senate and there will be no further anti-prohibition success at this session.

* * *

Forty-two percent interest on loans up to $300 remains as a legal rate in Wisconsin for two more years. The move to wipe out this law passed at the last session of the legislature was killed in the assembly. Supporters of the small loan law contend that while the interest rate is high, the high rate is necessary because of the large expense entailed in checking up the people who have nothing but household furniture for security. They also contend that if these people do not have the services of a small loan shop they can borrow no money elsewhere.

* * *

The utility program to make it easier for cities and villages to undertake their own utility service where commercial firms are believed to furnish inadequate service or to be charging excessive rates was blocked in the senate. All of the bills passed by the assembly are definitely dead at this session.

* * *

Governor Kohler has signed the Carroll bill which gives counties 10 percent instead of two percent of all fines collected. Fines go to the state school fund except for the percentage granted to counties. The change in the law will give counties about $50,000 more a year than they have been obtaining from this source. The Governor has also signed the bill requiring all public and private schools to have first aid kits in school rooms.

* * *

Wisconsin has 57 different varieties of native trees according to a book, "Forest Trees of Wisconsin," recently published by the state conservation commission. The oak leads in the number of varieties with eight. Twelve different forest trees are present in more than one variety. They are ash, aspen, birch, cedar, cherry, elm, hickory, locust, maple, oak, pine and spruce.

* * *

The new state highway commission, the first full-time body to operate in Wisconsin, is now in charge of Badger road work. The new commission has named Walter C. Buetow to continue on the job as state highway engineer. Jerry Donohue, Sheboygan, is chairman of the commission; Fred D. Seguin, Superior, vice chairman, and K. G. Kurtenacker, Madison, Secretary.

* * *

The solution of numerous conservation questions is being attempted through work now under way by different scientific groups cooperating with the conservation commission.

Questions the subject of study now include:—

How much will forest land be worth 50 years from now if planted under the forest crop law now?

Why are our prairie chickens disappearing?

Does carp seining damage lake bottoms?

What kind of fish will live in certain kinds of waters?

By a scientific study of the soil and the forest as well as possible forest cover in the northern part of the state the department of forestry will be able to estimate almost exactly how much future forests will be worth.

* * *

From now on it will be profitable business for citizens to watch for old auto licenses because reporting them will be worth exactly $2 each. Under the old law policemen received $2 when they turned in a person who did not have his car properly licensed. Under the Hunt bill signed by Governor Walter J. Kohler any informer can collect this fee.

* * *

Gov. Kohler has signed the Cashman bill providing two years of advanced courses in rural schools. The new law will make it possible to have 10 grades. Senator John Cashman, Denmark, contends that many farm children cannot afford to go to the village or city school when they have taken all the work offered in the country, but that many of them could study for two more years if they could get advanced subjects in their own nearby schools. The bill appropriates $10,000 the first year and $20,000 the second for the institution of the new system.

* * *

The Goodland bill to increase payments for cattle slaughtered by tuberculin retests has become law

through signature by Gov. Walter J. Kohler. The bill provides that the limit that can be paid for a slaughtered animal is raised up to $70 in case of registered stock where the former limit was $45. There is also an increase for grade animals.

* * *

After a year of special study in California, Louis O. Sordahl, 25, research assistant in physics at the University of Wisconsin until a year ago, is on his way to Africa where for three years he will study the sun's radiation at a station of the Smithsonian Institute. His home is in Viroqua, Wis.

The station is up on dry Mt. Brukaros, about 150 miles inland on the Hotentot reservation in what was formerly German Southwest Africa. His bride of a year will accompany him to collect museum specimens of birds and insects.

* * *

By the establishment at the last meeting of the conservation commission of 121 fish refuges in 27 counties of the state of Wisconsin, the commission has begun the work of protecting fish by setting aside areas in which they are safe the same way game has been protected for many years.

* * *

A new series of package libraries on Child Welfare subjects is announced by Almere L. Scott, director of debating and public discussion, University of Wisconsin Extension division.

The package libraries are loaned free to organizations and individuals seeking information on child dependency, institutional care, illegitimacy, the child delinquent, physically and mentally handicapped children, personality problems, marriage, community responsibility for child welfare, and other topics covered by the course of study and bibliography recently issued by the state board of control.

Widespread interest in child problems in connection with the proposed Wisconsin children's code has led to the issuance of the new series of package libraries, Miss Scott states.

* * *

Guarding the health of 15,430 students in the University of Wisconsin during a whole year is a busy job for the corps of physicians maintained for this purpose, although hospital cases and serious illnesses fluctuate little from one year to another, the annual report of the service indicates.

Office and house visits of the Student Health service increased more than 5,000 during the past year, but the number of individuals who were attended or who consulted the physicians was less by about 2,000 than during the previous year.

* * *

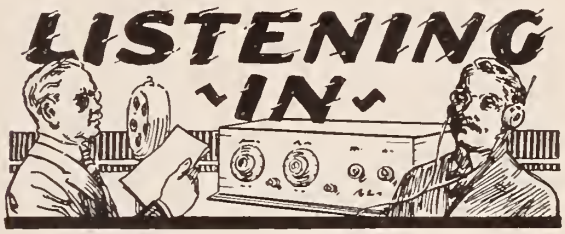
Eight mayors of Wisconsin get no salary, others receive up to $12,300 which is paid in Milwaukee according to a report on salaries of officials in 143 cities of Wisconsin for 1929, compiled by the municipal information bureau of the University of Wisconsin Extension division.

Five city managers in the state and their salaries are Janesville, $8,400; Kenosha, $7,200; Stevens Point, $5,000; Two Rivers, $4,500; Rhinelander, $3,900.

Seven cities in Wisconsin pay $4,000 or more to the heads of their government. Others among these are Madison, $4,800, and Oshkosh, $4,000.

* * *

Fully $100,000 worth of sphagum moss is produced in central Wisconsin each year. The growers have organized a cooperative sales company which aims to produce a better product, to improve the service, and to eliminate producers' competition.



LOSS OF CONFIDENCE

A member of the Industrial Commission called your Secretary to his office in August to discuss the case of a physician who had apparently perjured himself on the witness stand. The Commissioner added that while this was the exceptional case, still there were some few physicians in the state who were so partisan in their attitude as to cause the Commission to lose all confidence in them.

"Such partisanship not only hurts the doctor but his patient or employer as well. We are trying only to arrive at the facts. The physician must ever remember that he is there to give us his best judgment".

LIKES NEWS SERVICE

The mail brings a request from the editors of Southern Medicine and Surgery to be placed on the mailing list for the weekly news service to the lay press conducted by this Society.

"We are much impressed", says the card.

LONG DRIVES

The largest district in the state is the Eleventh which covers a territory about 200 miles in any direction. At the recent meeting at Solon Springs Dr. F. W. Mitchell of Ogema traveled 175 miles to be present as did Dr. J. F. Lambert of Antigo.

AN INVITATION

Dr. R. D. Thompson, Superintendent of the State Sanatorium at Wales, writes to suggest that he would be pleased to have members visit that institution on their way to or from the Madison meeting.

"They can thus see", says Dr. Thompson, "what type of institution we have, what kind of care we can give their patients when they recommend our institution to them, and they will have a better idea of the whole thing when they send a patient here for the treatment of tuberculosis."

TO HONOR PAST PRESIDENTS

Twenty-four past presidents of the State Medical Society of Wisconsin will be guests of honor at the Annual Dinner of the Society on September 12th. Dr. W. A. Pusey, Chicago, a past president of the American Medical Association, will be speaker of the evening.

Delegates and Alternates who will Compose House of Delegates for Eighty-Eighth Anniversary Meeting at Madison

Society	Delegate	Alternate
Ashland-B-I	C. J. Smiles, Ashland	M. L. Young, Ashland
Barron-P-W-S-B	D. L. Dawson, Rice Lake	I. G. Babcock, Cumberland
Brown-Kewaunee	R. L. Cowles, Green Bay	W. M. Wochos, Kewaunee
Calumet	J. W. Goggins, Chilton	J. J. Minahan, Chilton
Chippewa	A. J. Somers, Chippewa Falls	
Clark	E. L. Bradbury, Neillsville	R. R. Rath, Granton
Columbia	A. F. Schmeling, Columbus	H. E. Gillette, Pardeeville
Crawford	A. J. McDowell, Soldiers Grove	T. E. Farrell, Seneca
Dane	James P. Dean, Madison	W. T. Lindsay, Madison
	A. S. Thompson, Mt. Horeb	G. E. Bilstad, Cambridge
Dodge	A. E. Bachhuber, Sr., Mayville	A. A. Hoyer, Beaver Dam
Door	G. R. Egeland, Sturgeon Bay	E. J. Konop, Sawyer
Douglas	T. J. O'Leary, Superior	
Eau Claire and Associated	F. C. Kinsman, Eau Claire	R. E. Mitchell, Eau Claire
	J. A. Halgren, Menomonie	O. J. Blosmo, Menomonie.
Fond du Lac	S. E. Gavin, Fond du Lac	H. R. Sharpe, Fond du Lac
Grant	J. C. Betz, Boscobel	Elgie Kraut, Lancaster
Green	J. F. Mauermann, Monroe	W. G. Bear, Monroe
Green Lake-W-A	A. J. Wiesender, Berlin	G. E. Baldwin, Green Lake
Iowa		
Jefferson	H. O. Caswell, Ft. Atkinson	H. P. Bowen, Watertown
Juneau	C. C. Vogel, Elroy	
Kenosha		
La Crosse	G. Gundersen, La Crosse	W. J. Jones, La Crosse
Lafayette		
Langlade	J. C. Wright, Antigo	J. W. Lambert, Antigo
Lincoln	W. H. Bayer, Merrill	E. O. Ravn, Merrill
Manitowoc	L. J. Moriarty, Two Rivers	F. E. Turgasen, Manitowoc
Marathon	H. H. Christensen, Wausau	S. M. B. Smith, Wausau
Marinette-Florence	G. R. Duer, Marinette	J. V. May, Marinette
Milwaukee	W. M. Kearns, 230 Wisconsin Ave.	S. M. Mollinger, 396-11th Ave.
	M. G. Peterman, 167-17th St.	A. B. Schwartz, 418 E. North Ave.
	E. F. Peterson, Wauwatosa	S. G. Higgins, Wells Bldg.
	B. Krueger, Cudahy	A. A. Pleyte, 558 Jefferson St.
	F. A. Thompson, 425 E. Water St.	R. J. Dalton, Wells Bldg.
	D. E. W. Wenstrand, 210 E. Wis. Ave.	Edith McCann, Goldsmith Bldg.
	J. Dieterle, Goldsmith Bldg.	C. J. Coffey, Majestic Bldg.
	E. W. Miller, 217 Michigan St.	W. Joseph, 366 Greenfield Ave.
	S. J. Seeger, Wells Bldg.	Oscar Lotz, Wells Bldg.
	T. Willett, 625-72nd Ave., West Allis	H. C. Schumm, Goldsmith Bldg.
	H. J. Gramling, 1321 Forest Home Ave.	G. W. Neilson, 776-3rd St.
	H. W. Powers, 123 Wisconsin Ave.	F. D. Murphy, 530 Wis. Ave.
Monroe	S. D. Beebe, Sparta	T. J. Sheehy, Tomah
Oconto	C. J. Ouellette, Oconto	E. A. Linger, Oconto
Oneida-F-V	C. A. Richards, Rhinelander	
Outagamie	V. F. Marshall, Appleton	J. B. MacLaren, Appleton
Pierce-St. Croix	J. W. Prentice, Amery	Rolla Cairns, River Falls
Portage	Erich Wisiol, Stevens Point	F. R. Krembs, Stevens Point
Price-Taylor	F. W. Mitchell, Ogema	G. E. MacKinnon, Prentice
Racine	H. B. Keland, Racine	L. E. Fazen, Racine
Richland	H. C. McCarthy, Richland Center	J. S. Booher, Richland Center
Rock	W. J. Allen, Beloit	H. O. Delaney, Beloit
	W. H. McGuire, Janesville	P. A. Fox, Beloit
Rusk	W. F. O'Connor, Ladysmith	J. C. Baker, Hawkins
Sauk	H. J. Irwin, Baraboo	F. E. Tryon, Baraboo
Shawano	A. J. Gates, Tigerton	E. E. Evenson, Wittenberg
Sheboygan	Otho Fiedler, Sheboygan	C. J. Weber, Sheboygan
Trempealeau-J-B	C. F. Peterson, Independence	H. A. Jegi, Galesville
Vernon	Wm. M. Trowbridge, Viroqua	W. H. Remer, Chaseburg
Walworth	Edward Fucik, Williams Bay	M. V. DeWire, Sharon
Washington-Ozaukee	H. M. Lynch, Allenton	C. A. Balkwill, Grafton
Waukesha	M. R. Wilkinson, Oconomowoc	H. T. Barnes, Delafield
Waupaca	F. E. Chandler, Waupaca	T. E. Loope, Iola
Winnebago	J. W. Lockhart, Oshkosh	W. P. Wheeler, Oshkosh
Wood	F. X. Pomainville, Wisconsin Rapids	K. H. Doege, Marshfield

Large Attendance Anticipated for Madison Annual Meeting September 11th; Discussional Groups Offer Large Number of Subjects

Upwards of 800 members are expected to attend the 88th Anniversary Meeting of the State Medical Society at Madison during the three day sessions from September 11th to 13th, inclusive. Discussional group meetings running simultaneously in four halls on Thursday morning and in five halls on Friday morning, increase the number of presentations over previous meetings from thirty to forty-two, offering a wide variety of subject matter to interest members in all phases of practice as well as the general practitioner.

Guest speakers from out of state include Dr. Olin West, Secretary and General Manager of the American Medical Association; Dr. Morris Fishbein, Editor of the Journal of the Association; Dr. William Allen Pusey, Past President of the Association; Prof. Bernard Fisher of the University of Frankford; Dr. John H. Musser, President of the American College of Physicians; Drs. Ralph Major and Harry Wahl of the University of Kansas; Dr. George Heuer of Cincinnati University; Dr. Joseph Barcroft, Professor of Physiology of Cambridge University, England; Dr. Herman Kretschmer, Chicago; Dr. F. J. Hirschboeck, Duluth; Dr. A. W. Adson, Rochester; Dr. Harold O. Jones, Chicago; Dr. C. F. McClintic, Detroit; Dr. Charles G. Sutherland, Rochester; Dr. F. S. Smyth, Washington University, and Dr. Alfred A. Strauss of Chicago.

Innovations of the Eighty-Eighth meeting are three papers on Wednesday morning devoted to medical practice in its broad economic aspects, and group discussional meetings on Thursday and Friday mornings. Eighteen subjects will be presented during the discussional sessions after which each will be opened to round table discussions by the members in attendance. Dry clinic material will be presented at many of these group meetings to combine a formal presentation with a more general discussion than can be had in the single larger assemblies. Each of the two mornings has been divided into two periods so that members may select the subject matter most of interest in each period, a brief intermission permitting change from room to room.

Opening with the annual golf tournament on Tuesday afternoon, September tenth, entertainment for the members will include an open meeting on Wednesday evening at which Dr. Fishbein will speak on "Educating for Health" followed by a smoker in the Rathskellar, a bridge luncheon for the ladies on Thursday noon for the organization of a state woman's auxiliary; seven alumni luncheons on Thursday noon for the members and the Annual Dinner on Thursday evening. "Problems in the Corporate Practice of Medicine" will be the subject of Dr. Pusey's address at the Thursday evening dinner.

No previous session of the State Society has offered a comparable setting to that which will be found in the new Memorial Union Building on the University campus which is to be devoted to this session. The entire building has been placed at the disposal of the Society and all sessions of the Society including the Smoker, Annual Dinner, Alumni Luncheons, and entertainment for the ladies will be accommodated in this single building. Memorial Union is located on Lake Mendota at the foot of Langdon Street just opposite the University Library. The building is just a mile from the down town hotels and may be reached by street car service from the State Street corner of the Capitol Square.

PROGRAM SYNOPSIS

(All sessions and meetings at Memorial Union Building.)

TUESDAY, Sept. 10th.

9:00 A.M.	Golf practice rounds, Maple Bluff Country Club.
12:00 M.	Buffet Lunch, Maple Bluff Country Club.
1:00 P.M.	Annual Golf Tournament play begins.
2:00 P.M.	Council Meeting.
7:00 P.M.	House of Delegates, first session.

WEDNESDAY, Sept. 11th.

8:00 A.M.	Registration and Exhibits Open.

DR. MASON C. DARLING
First President, State Medical Society of Wisconsin—1847

9:00 A.M.	First Scientific Session.
12:00 M.	Council Luncheon Meeting.
2:00 P.M.	Second Scientific Session.
7:00 P.M.	House of Delegates, second session.
8:15 P.M.	Open Meeting, Dr. Morris Fishbein — "Educating for Health".
9:30 P.M.	Smoker for Members, Rathkellar.

THURSDAY, Sept. 12th.

8:00 A.M.	Registration and Exhibits Open.
8:00 A.M.	House of Delegates, third session.
8:30 A.M.	Third Scientific Session.
12:00 M.	Alumni Luncheons.
12:00 M.	Ladies Bridge Luncheon, organization meeting for State Woman's Auxiliary.
2:00 P.M.	Fourth Scientific Session.
7:00 P.M.	Annual Dinner, informal, Dr. William Allen Pusey, speaker of the evening.

FRIDAY, Sept. 13th.

8:00 A.M.	Registration and Exhibits Open.
9:00 A.M.	Fifth Scientific Session.
12:00 M.	Luncheon, Radiological Section.
2:00 P.M.	Sixth Scientific Session.

Dr. Mason C. Darling, later a representative in Congress from Wisconsin was born in Elmhurst, Mass., May 18, 1801, attended the public schools; taught school in the state of New York, studied medicine, was graduated from the Berkshire Medical College in 1824, and practiced medicine for 13 years; moved to Wisconsin in 1837 and was one of the original settlers at Fond du Lac; member of the Territorial legislative assembly 1840–1846; member of the Territorial council in 1847 and 1848; upon the admission of Wisconsin as a State into the Union was elected as a Democrat to the Thirtieth Congress, and served from June 9, 1848, to March 3, 1849; resumed the practice of medicine, elected the first mayor of Fond du Lac in 1852; died in Chicago, Ill., March 12, 1866; interment in Rienzi Cemetery, Fond du Lac, Wis.

Practiced medicine and dealt in real estate in Fond du Lac, Wis., until 1864 when he moved to Chicago where he died 1866. His body was brought back to Fond du Lac for burial. He was mayor of Fond du Lac in 1852.

The scientific program as announced by Dr. W. G. Sexton, Chairman of the Committee on Scientific Work, follows:

WEDNESDAY, SEPTEMBER 11th

9 A. M. Great Hall

8:00 Registration, Memorial Union Building.

9:00 Wisconsin Laws and Legal Rulings as They Pertain to Practice of Medicine—Fred M. Wylie, Attorney at Law, Madison.

9:40 The Doctor and His Collections — Prof. Robert R. Aurner, Department of Business Administration, School of Commerce, University of Wisconsin, Madison.

10:15 Alkalosis—Dr. W. J. Tucker, Ashland Clinic, Ashland.
Discussion—Dr. B. H. Schlomovitz, Milwaukee.

10:45 Fat Embolism—Dr. E. L. Miloslavich, Milwaukee.
Discussion—Dr. W. J. Carson, Milwaukee.

11:15 Opportunities and Trends in the Practice of Medicine—Dr. Olin West, Secretary and General Manager, American Medical Association, Chicago.

2 P. M. Great Hall

2:00 Bronchoscopy—Dr. Wellwood M. Nesbit, Asst. Prof. Oto-Laryn., University of Wisconsin, Madison.
Discussion—Dr. Lyman A. Copps, Marshfield.

2:30 Spinal Cord Tumors—Dr. Loyal Davis, Assoc. Prof. Surg., Northwestern Univ. Med. School, Chicago.
Discussion—Dr. E. R. Schmidt, Madison.

3:00 In Memory of Dr. Charles S. Sheldon—Dr. Rock Sleyster, Wauwatosa.

3:10 Sterility—Dr. Roland S. Cron, Asst. Clin. Prof. Obst. and Gyn., Marquette Univ., Milwaukee.
Discussion—Dr. Carl Harper, Madison.

3:40 Prostatic Obstruction—Dr. Herman Kretschmer, Asst. Clin. Prof. Surg. (Gen. Urin.), Rush Medical College, Chicago.
Discussion—Dr. Cyril G. Richards, Kenosha.

4:10 A Study in Wisconsin Maternal Mortality, 1927 and 1928—Dr. Charlotte Calvert, State Board of Health, Madison.

4:30 Gas Treatment of Malignant Tumors—Prof. Bernard Fisher, Prof. of Path., University of Frankford, Germany.

8 P. M.

Open Meeting. Educating for Health—Dr. Morris Fishbein, Editor, Jour. A. M. A. Great Hall.

9:30 P. M.

Smoker. Rathskellar.

THURSDAY, SEPTEMBER 12th

8:30 to 9:45 A. M.

Room A

Chairman—Dr. Joseph F. Smith, Wausau.

Spinal Anaesthesia—Dr. Ralph M. Waters, University of Wisconsin, Madison.
Discussion—Dr. R. B. Stout, Jackson Clinic, Madison.

Room B

Chairman—Dr. Hart Stang, Eau Claire.

Pernicious Anemia—Dr. Wm. S. Middleton, Assoc. Prof. Clinical Med., University of Wisconsin, Madison.
Discussion—Dr. T. L. Szlapka, Milwaukee.

Room C

Chairman—Dr. Arthur W. Rogers, Oconomowoc.

Neuro-Syphilis—Dr. W. F. Lorenz, Prof. Neuro-Psych., University of Wisconsin, Madison.
Discussion—Dr. W. J. Bleckwenn, Madison.

Room D

Chairman—Dr. Gregory Connell, Oshkosh.

The Value of Sympathetic Ganglionectomy and Trunk Resection in the Treatment of Raynaud's and Allied Vascular Diseases—Dr. A. W. Adson, Asst. Prof. Surg., Mayo Clinic, Rochester.
Discussion—Dr. J. L. Yates, Milwaukee.

9:45 to 11 A. M.

Room A

Use and Abuse of Forceps—Dr. John Harris, Prof. Obstetrics, University of Wisconsin, Madison.
Discussion—Dr. J. B. Vedder, Marshfield.

Room B

Massive Atelectasis of the Lungs—Dr. F. J. Hirschboeck, Duluth.
Discussion—Dr. H. M. Coon, Stevens Point.
Dr. A. A. Pleyte, Milwaukee.

A portion of the main meeting room.

Room C

Cardiac Decompensation—Dr. Francis D. Murphy, Asst. Clin. Prof. Med., Marquette Univ., Milwaukee.
Discussion—Dr. H. P. Greeley, Madison.
Dr. G. Hoyme, Eau Claire.

Room D

Nephritis—Dr. Ralph Major, Prof. Medicine, University of Kansas, Kansas City, Mo., and Dr. Harry Wahl, Prof. Pathology, University of Kansas, Kansas City, Mo.
Discussion—Dr. Louis M. Warfield, Milwaukee.

11:15 A. M.

Main Auditorium

11:00 Annual Oration in Medicine. The Normal and Diseased Heart—Dr. John H. Musser, President, American College of Physicians, and Prof. Medicine, Tulane University, New Orleans, La.

Noon

Alumni Luncheons.

2 P. M.

2:00 President's Address. The Form of Disease; the Clinical Picture and the Individual—Dr. K. W. Doege, Marshfield Clinic, Marshfield.

2:30 Recent Diagnostic Aids in Gynecology—Dr. Harold O. Jones, Assoc. Prof. Gyn., Northwestern Med. School, Chicago.
Discussion—Dr. E. F. Schneiders, Madison.

3:00 Use of Pituitrin in Obstetrics—Dr. Warren E. Leaper, Green Bay.
Discussion—Dr. D. T. Jones, Wausau.

In the Rathskellar.

3:30 Report of Delegates to A. M. A.—Dr. Joseph F. Smith, Wausau.

3:40 Proceedings of State Society — Mr. J. G. Crownhart, Secretary.

3:45 The Relation of the Pathologic Lesion of Goitre to Its Clinical Picture—Dr. A. L. Mayfield, Kenosha.
Discussion—Dr. E. F. Bickel, Oshkosh.

4:15 Pathology of Gall Bladder—Dr. Harry Wahl, Dean of School of Medicine, Prof. Path. and Bact., University of Kansas, Kansas City, Mo.
Discussion—Dr. C. H. Bunting, Madison.

4:45 Minor Disabilities of the Knee—Dr. F. E. Turgasen, Manitowoc.
Discussion—Dr. D. L. Dawson, Rice Lake.

7 P. M.

Annual Dinner (Informal)—Great Hall, Memorial Union Building. This dinner is given this year to honor all past presidents of the Society. Speaker of the evening—Dr. William Allen Pusey, Past President, American Medical Association—Problems in the Corporate Practice of Medicine.

FRIDAY—SEPTEMBER 13th

9 to 10:30 A. M.

Room A

Chairman—Dr. Joseph F. Smith, Wausau.
Treatment of Trophic Ulcers and Other Nervous Diseases by Alcoholic Injections—Dr. C. F. McClintic, Prof. Nervous and Surg. Anat., Detroit College of Medicine, Detroit.
Discussion—Dr. Hans Reese, Madison.

Room B

Chairman—Dr. Hart Stang, Eau Claire.
Hematuria—Dr. J. C. Sargent, Prof. G. U. Surg., Marquette Univ., Milwaukee.
Discussion—Dr. Alf Gundersen, La Crosse.
Dr. C. J. Smiles, Ashland.

Room C

Chairman—Dr. Arthur W. Rogers, Oconomowoc.
Oxygen Treatment of Pneumonia—Dr. John Pink, Milwaukee.
Discussion—Dr. Wayne A. Munn, Janesville.

Room D

Chairman—Dr. Gregory Connell, Oshkosh.
X-Ray as a Diagnostic Aid in the So-Called Nervous Patient.—Dr. F. W. Mackoy, Sacred Heart Sanitarium, Milwaukee.
Discussion—Dr. F. J. Hodges, Madison.

Room E

Chairman—Dr. Stanley J. Seeger, Milwaukee.
Industrial Injuries to the Eye—Dr. Nelson M. Black, Milwaukee.
Discussion—Dr. E. H. Brooks, Appleton.

10:30 A. M. to 12

Room A

Thyroid Disorders—Dr. Arnold Jackson, Jackson Clinic, Madison.
Discussion—Dr. K. H. Doege, Marshfield.

Room B

X-ray in Duodenal Ulcer—Dr. Charles G. Sutherland, Mayo Clinic, Rochester.
Discussion—Dr. J. A. Evans, La Crosse.

Room C

Diabetes—Dr. C. C. Edmondson, Waukesha.
Discussion—Dr. F. G. Anderson, Eau Claire.

Room D

Pediatric Clinic—Dr. J. E. Gonce, Asst. Prof. Ped., University of Wisconsin, Madison.
Discussion—Dr. H. K. Tenney, Madison.

Room E

Gastric Surgery—Dr. Alfred A. Strauss, Chicago.
Discussion—Dr. E. V. Smith, Fond du Lac.

Noon

Luncheon—Radiological Section.

2 P. M.

2:00 Address by the President-Elect — Dr. Frederick J. Gaenslen, Prof. Orth. Surg., Univ. of Wis., Milwaukee.

2:30 Spontaneous Pneumothorax — Dr. T. W. Nuzum, Pember-Nuzum Clinic, Janesville. *Discussion*—Dr. Woodruff Smith, Ladysmith.

3:00 The Present Status of Radiation Therapy in Pediatrics—Dr. Ernst A. Pohle, Prof. Radiology, University of Wisconsin, Madison, and Dr. H. K. Tenney, Madison. *Discussion*—Dr. Gentz Perry, Rhinelander.

3:30 Recent Observations on the Volume of the Spleen—Dr. Joseph Barcroft, Prof. Physiology, Cambridge University, Cambridge, England.

4:00 Annual Oration in Surgery. Heliotherapy in Medicine and Surgery—Dr. George Heuer, Prof. of Surgery, Cincinnati University, Cincinnati, Ohio.

Annual Golf Tournament to be Played at Maple Bluff Country Club

With the announcement that the annual golf tournament will be played at the Maple Bluff Country Club on Tuesday, September 10th, Dr. R. C. Blankinship, chairman of this year's play, states that early reservations indicate a new record in registrations. Reservation blanks have been mailed all members, but the Committee urges late comers to enter the play, notifying the chairman by wire at the First Central Building, Madison, of their late entry. Fee for the play is set at $3 which covers green fees, caddy, and the noon buffet lunch.

Fifteen prizes in addition to the President's and Secretary's Cups will be presented as result of the tournament. Under a standing rule of the play, no member will be awarded more than one prize. Other members of the golf committee are Drs. W. D. Stovall and Frank Weston.

To Organize Woman's Auxiliary Thursday

Wives, sisters and daughters of the members will be the guests of the State Society at a luncheon to be held in the Trophy Room and Rathskellar of the Memorial Union Building on Thursday noon for the organization meeting of the state Woman's Auxiliary. A special committee consisting of Dr. Jessie P. Allen, Beloit; Dr. Eleanore Cushing–Lippitt of Milwaukee and Dr. Elizabeth Comstock of Arcadia will assist in this first meeting.

Following the luncheon the ladies will be addressed by Dr. Morris Fishbein, Editor of the Journal of the American Medical Association, on the possibilities of the organization. Election of officers and adoption of the model constitution will follow immediately and the remainder of the afternoon will be devoted to bridge. The model constitution will be given each at the luncheon so that opportunity may be had to make any desired corrections or additions before adoption.

Entertainment Features Announced

In addition to the golf tournament on Tuesday, entertainment plans include the open meeting Wednesday evening followed by the smoker for members, alumni luncheons on Thursday noon and the Annual Dinner (informal) on Thursday evening.

The Wednesday evening smoker will be held in the Rathskellar of the Memorial Union building. Small tables will accommodate the several hundred in attendance and the evening will be devoted to good fellowship, entertainment features and a late buffet lunch,—all without any set program.

On Thursday noon seven separate rooms in the building will be devoted to alumni luncheons for Rush, Pennsylvania, Marquette, Wisconsin, Michigan, Chicago P. and S. and Illinois, and Northwestern.

Dr. William Allen Pusey, Past President of the American Medical Association, will be the sole speaker at the Annual Dinner of the Society to be given on Thursday evening. Dr. Pusey is well known for his medical statesmanship and will discuss "Problems in the Corporate Practice of Medicine." This subject matter received special attention from the national House of Delegates in executive session at the Portland meeting at which Dr. Pusey opened the general discussion.

The bar in the Rathskellar.

Corner in the rest room, Memorial Union.

House of Delegates to Pass Upon Important Questions at Three Sessions

Beginning with a session at seven Tuesday evening, September 10th, the House of Delegates will hold three scheduled sessions to pass upon most important questions of future policies of the State Society. These will include the entire subject matter of suggested expansion of the Society's work, development of the Foundation Fund, suggested life memberships, and passing upon committee reports and elections for the ensuing year. Procedure of the House has been outlined to each delegate and alternate in a special letter from the Secretary mailed the third week in August. All meetings of the House will be open to members who, even though not delegates or alternates, may address the House upon request made to the Speaker. The letter outlining procedure follows:

The sessions of the House this year beginning Tuesday evening, September 10th, promise to be of such major importance that your Secretary takes this opportunity to call your attention to the reports and methods of procedure.

The reports published in the August and September Journals should be read by every delegate and alternate and a special copy is enclosed. *Please bring this copy with you to the meeting.* Note particularly the recommendations of the committees upon which the House will be called to act.

When the House is called to order the Speaker will appoint from among you four reference committees of the House. The first is on Credentials, the second on Resolutions, the third on Reports of Officers and the fourth on Reports of Standing Committees. These committees will all report on Wednesday evening at which time the reports will be before the House for discussion and action.

All intended resolutions should be introduced on Tuesday evening, the first session, and should be typewritten in triplicate.

Elections of the following will be held Tuesday evening:

Councilors—

1. To succeed Edward Evans, La Crosse, term expires.
2. To succeed T. J. Redelings, Marinette, term expires.
3. To succeed Joseph F. Smith, Wausau, term expires.
4. To succeed H. M. Stang, Eau Claire, term expires.
5. To succeed J. L. Shaw, Manitowoc, resigned.

Delegate to A. M. A.—

1. To succeed Joseph F. Smith, Wausau, term expires.

Alternate to A. M. A.—

1. To succeed R. E. Mitchell, Eau Claire, term expires.

Nominations for councilors must come from delegates residing in the districts affected. Thus only delegates in the Fifth District (Manitowoc, Sheboygan, Calumet and Washington–Ozaukee counties) may nominate for a councilor to succeed J. L. Shaw, resigned.

One or more nominations for the offices of President-Elect, Speaker of the House and Vice-Speaker of the House as well as for a place of meeting in 1930 are presented by the Committee on Nominations at the Thursday morning session. This committee is selected on Tuesday night in the following manner: The Secretary reads the list of societies in the first district and as he reads the list the delegates from those counties rise and remain standing. At the conclusion of the reading the delegates nomi-

nate from among themselves some one delegate to represent that district on the committee on Nominations. Similar procedure is followed for the other districts. This method insures a representative committee. Nominations of the committee do not preclude additional nominations from the floor of the House.

In the past five years your Secretary has made every effort to expedite the handling of the mass of business that must come before the sessions of the House. Delegates and alternates should keep in mind, however, that the floor is open to them at all times. A full discussion is needed if the House is to accomplish the best results in interest of the profession of the state. Just because you may happen to be a new delegate, do not feel that you must remain silent. All delegates are striving to attain the same ends and each discussion is welcomed.

A word to the alternates: It has been the custom to open the floor to you for any discussions you may wish to make. You will not vote, however, if your delegate is present at the time the vote is taken. For this reason it is well for delegate and alternate to sit together so that the alternate may be apprised should the delegate leave the meeting.

All members of the Society are welcome to attend the sessions of the House. A member, not a delegate or alternate, may address the House by notifying the Secretary or Speaker of the House of his desires previous to or during the sessions.

EXHIBIT SPACE SOLD OUT

Twenty commercial-scientific exhibits will fill the registration hall on the first floor of the Memorial Building at the Madison sessions. All booths were sold two months before the opening of the sessions. Exhibitors will include:

1. Pengelly X-Ray Company.
2. Dry Milk Company.
3. E. H. Karrer and Company.
4. Medical Protective Company.
5. Spencer Lens Company.
6. Hanovia Chemical and Mfg. Co.
7. Abbott Laboratories.

Registration Booths.

8. Kelley–Koett Mfg. Co.

Memorial Union Building, Madison, which is to be devoted to the 88th Anniversary Meeting in September.

9. Roemer Drug Company.
10. Burdick Company.
11. Horlick's Malted Milk Corporation.
12. Kremers–Urban Company.
13. Petrolagar Laboratories, Inc.
14. E. R. Squibb and Sons.
15. Victor X-Ray Company.
16. Mead Johnson and Company.
17. Victor X-Ray Company.
18. Victor Mueller Company.
19. Mellin's Food Company.
20. Saunders Company.

Additional Committee Reports

EDITORIAL BOARD

To the 1929 House of Delegates:

During the past years the report of the Editorial Board to the House of Delegates has usually consisted of a brief summary of the past year's work—failures and successes. This year as far as the past is concerned we are going to let the Journal speak for itself. Plans for the future of the Journal have demanded our attention, and we would like to give you some idea of our thoughts.

All of you no doubt have read President Doege's admirable suggestion that the State Society employ for full time a physician as medical editor of the Journal and who would also act as "stimulator" for more scientific medicine and surgery on the part of our members. That this suggestion is most excellent and has many advantages cannot be questioned, but whether this plan is a practical one at the present time is a problem which we believe should be given careful thought and consideration.

The employment of a full time medical man of the caliber that the position demands will of course mean a materially increased budget. To what extent the Society is able to finance this venture must be decided by the Council. The Editorial Board is at this time presenting to the Council and House of Delegates a number of possibilities with a request for discussion, suggestions, and advice regarding this question.

Respectfully submitted,

OSCAR LOTZ, *Chairman.*

REPORT OF COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

I. MEDICAL EDUCATION.

Clinical teaching facilities in both Wisconsin Medical Schools, Marquette University and the State University have been expanded in the past year and are adequate for the immediate needs. The completion of the new County Hospital and Dispensary at Milwaukee now provide increased facilities for Marquette students in addition to those institutions which have served these needs in the past. Plans are under way for the construction of a new medical school building which will provide for the acceptance of a larger number of students in the two year course.

At the University of Wisconsin there were forty-eight students accepted for the four year course and an equal number for the two year course. Forty-one seniors were graduated in 1929. Extra-mural teaching under the preceptor plan has proven quite successful and has progressed from the experimental stage to an extension for the second course. New departments have been created in the Service Memorial Institute Building at Madison, primarily a laboratory building, which provide for both the Wisconsin General Hospital and the Outpatient Service. The Radiological Department has been reorganized under Dr. E. A. Pohle. The Obstetrical Department has also been reorganized under Dr. J. W. Harris. Increased facilities are provided by the Physiotherapy Department. Medical Library Service has been greatly increased in the past year. Physicians are urged to avail themselves of the material at their service through the package loan system. The service reports from July 1928 to June 1929 are as follows:

Out of town		Madison		Total	Total
Requests	Loans	Requests	Loans	Requests	Loans
3153	5187	503	1170	3656	6357

The Extension Division has provided for postgraduate medical instruction in the cities of the Upper Wisconsin section. A clinical course in Pediatrics for general practitioners has been conducted by Dr. Alexis F. Hartmann and Dr. Francis S. Smyth of the Pediatrics Department of Washington University. Short courses have been planned in medical economics and clinical pathology, the former in conjunction with the program of the annual meeting and the latter will be scheduled most probably in the December vacation period at the medical school.

II. HOSPITAL DEVELOPMENT.

Wisconsin ranks foremost among the states in providing hospital beds in ratio to population. The 1929 report of the American Medical Association based on the estimate of the Census Bureau presents the following figures. Wisconsin has a ratio of 154 persons to a hospital bed, Colorado has 168, Nevada 171, California 173 and New York 184. It is obvious that whereas our centralized hospitals adequately serve the urban population, our rural sections are badly in need of some system of equalization of service and a distribution of those facilities to the less fortunate regions of this state. Increasing extension of postgraduate clinical teaching in these sections through cooperation of county medical societies is obviously also the desideratum.

The following figures for 1928 represent the number and capacity of hospitals according to agencies owning or in control.

	Hospitals	Beds*
Federal	4	1,097
State	15	4,679
County	55	9,998
City	13	545
Total Gov.	87	16,319
Church	59	5,915
Fraternal	1	20
Industrial	2	24
Individual or partnership	29	423
Independent	47	2,486
Total Non-Gov.	138	8,868

* Figure does not include bassinets. The total hospital capacity of state beds and bassinets is given as 26,471.

The American Medical Association has registered 225 Wisconsin hospitals with a total capacity of 26,471 beds. It has approved for general internship 20 hospitals, and for residency in a specialty 9 hospitals. The report on Hospital Standardization of the American College of Surgeons admits 34 hospitals on its fully approved list and has conditioned 4 hospitals.

J. W. LAMBERT,
C. R. BARDEEN,
L. F. JERMAIN.

Central States Pediatric Society Meets at Milwaukee September 27-28; State Society Members Invited to Attend Sessions

Meeting at the Tabernacle Baptist Church at 17th and Wells Streets, Milwaukee, the Central States Pediatric Society will hold a two day session on September 27th and 28th. Members of the State Medical Society of Wisconsin interested in this meeting will be welcomed as guests, according to Dr. J. Gurney Taylor, Milwaukee, President of the Society. Registration for members and guests at this Fourteenth Annual Meeting will be at the Milwaukee Children's Hospital. The advance program follows:

FRIDAY, SEPTEMBER 27TH

Tabernacle Baptist Church, 1713 Wells Street
Adjoining Milwaukee Children's Hospital

1. 9:00 A.M. Rubella Immediately Following Rubeola, Case Report—J. Gurney Taylor.
2. 9:10 A.M. The Development of Bone—E. J. Carey, Prof. Anatomy Marquette University School of Medicine.
3. 9:25 A.M. Acute Intestinal Obstruction, Case Report—G. H. Fellman.
4. 9:30 A.M. Suprarenal Hemorrhage — A. L. Kastner.
5. 9:40 A.M. Chemical Blood Analysis and Its Diagnostic Importance—J. C. Bock, Prof. Physiologic Chemistry, Marquette University School of Medicine.
6. 9:55 A.M. Staphylococcus Empyema with Recovery, 2 Month Infant—R. M. Greenthal.
7. 10:00 A.M. The Use of Toxoid for Immunization Against Diphtheria—A. B. Schwartz.
8. 10:15 A.M. Use of Toxoid for Immunization Against Scarlatina—H. O. McMahon.

   10:30 A.M. Intermission.
9. 10:40 A.M. Nutritional Requirements of Sick Children—M. G. Peterman.
10. 10:55 A.M. Pyloric Stenosis, Case Report—S. H. Lippitt.
11. 11:00 A.M. Transfusions in Children—S. J. Seeger, Surgeon to Milwaukee Children's Hospital.
12. 11:15 A.M. Acrodynia, Case Report—H. R. Foerster, Associate Professor Dermatology, Marquette University School of Medicine; and Milwaukee Children's Hospital.
13. 11:20 A.M. The Problem of Juvenile Flat Feet—H. C. Schumm, Orthopedist to Milwaukee Children's Hospital; and Assistant Prof. Orthopedics, University of Wisconsin Medical School.
14. 11:30 A.M. Hypertension, Case Report—G. F. Kelly.
15. 11:40 A.M. Osteomyelitis; with Fistula of Bladder, Case Report—N. Bourne, Associate Urologist, Milwaukee Children's Hospital.
16. 11:45 A.M. Unusual Dyschondroplasia—W. P. Blount, Associate Orthopedist, Milwaukee Children's Hospital.
17. 11:50 A.M. Case Report—R. Ritchie, Resident Physician, Milwaukee Children's Hospital.
18. 12:00–2:00 P.M. Lunch and Exhibits.

19. 2:00 P.M. Diabetes Insipidus, Case Report—M. G. Peterman.
20. 2:05 P.M. Thymic Shadows in Newborn—S. E. Kohn.
21. 2:15 P.M. Unusual Case of Edema—R. M. Hall.
22. 2:20 P.M. Teeth in Congenital Syphilis—T. R. Abbott, Dental Surgeon to Milwaukee Children's Hospital.
23. 2:35 P.M. Dental Abnormalities in Children—H. H. Reese, Assistant Professor Neuropsych., University of Wisconsin Medical School.
24. 2:50 P.M. Medical Aspects of the Nursery School—B. T. Haessler.
25. 3:00 P.M. Anesthesia in Children—R. M. Waters, Professor Anaesthesia, University of Wisconsin Medical School.
26. 3:10 P.M. Case Report—L. B. Saffro, Milwaukee Children's Hospital.
27. 3:15 P.M. The Management of Strabismus—F. H. Haessler, Ophthalmologist to Milwaukee Children's Hospital.
28. 3:30 P.M. Case Report—D. Koch, Milwaukee Children's Hospital.
29. 3:35 P.M. Anomalies of Small Intestine—Irwin Schulz, Associate Surgeon to Milwaukee Children's Hospital.
30. 3:40 P.M. Mastoiditis in Infants—T. L. Tolan, Otolaryngologist to Milwaukee Children's Hospital.
3:50 P.M. Intermission.
31. 4:00 P.M. Case Report—H. B. Miner, Milwaukee Children's Hospital.
32. 4:05 P.M. Fistula Auria Congenita, Case Report—A. B. Schwartz.
33. 4:10 P.M. The Use of Citric Acid Milk in Infant Feeding—J. E. Gonce.
34. 4:20 P.M. Case Report—A. E. Cohen, Milwaukee Children's Hospital.
35. 4:25 P.M. Case Report—J. Moch, Milwaukee Children's Hospital.
36. 4:30 P.M. Case Report—A. Shaffer, Milwaukee Children's Hospital.
37. 4:35 P.M. Case Report—R. Garens, Milwaukee Children's Hospital.

SATURDAY, SEPTEMBER 28TH

Muirdale Sanatorium, Wauwatosa

38. 9:00 A.M. Paper—G. L. Bellis, Medical Director, Muirdale Sanatorium.
39. 9:10 A.M. Osteomyelitis — F. J. Gaenslen, Prof. Ortho. Surgery, University of Wisconsin Medical School.
40. 9:25 A.M. Atresia of Oesophagus, Case Report, S. M. B. Smith.
41. 9:30 A.M. Experimental Acute Glomerulouephritis in Rabbits—L. M. Warfield.
42. 9:45 A.M. Pertussis Vaccine in Prophylaxia, R. P. Schowalter, Home for Dependent Children, Milwaukee County.
43. 9:55 A.M. Resuscitation of the Newborn—R. S. Cron, Associate Prof. Gynecology and Obstetrics, Marquette University Medical School.
44. 10:10 A.M. Tuberculosis in Children—K. E. Kassowitz, Milwaukee Children's Hospital.
45. 10:20 A.M. X-ray Studies of Bone in Continuous Phosphorous Ingestion—H. J. Zillmer, Milwaukee Children's Hospital.
10:30 A.M. Intermission.
46. 10:40 A.M. Tonsils and Nutrition, A School Survey—E. Cushing-Lippitt.
47. 10:50 A.M. Chronic Glomerulonephritis with Lipoid Changes. Studied 5 Years to Death—F. D. Murphy, Professor of Medicine, Marquette University School of Medicine
48. 11:05 A.M. Rheumatic Fever—N. Enzer, Director Laboratories, Mt. Sinai Hospital.
49. 11:15 A.M. Fungus Infection in a Child Treated with Thymol—Oscar Lotz, Wisconsin Anti-Tuberculosis Association.
50. 11:20 A.M. Congenital Syphilis—S. M. Marksson, Dermatologist to Milwaukee Children's Hospital.
51. 11:30 A.M. Cold Vaccines—Results of Prophylactic Inoculations — F. R. Janney.
52. 11:40 A.M. 500 Consecutive Chest Roentgenograms in Newborn Infants—G. W. Stevens, Roentgenologist, Columbia Hospital.
53. 11:50 A.M. Acute Mediastinal Abscess, Case Report—B. J. Malnekoff, Milwaukee Children's Hospital.
54. 11:55 A.M. Tuberculosis in Children from the Sociological Viewpoint—A. A. Pleyte, Wisconsin Anti-Tuberculosis Association.
55. 12:05 A.M. Oppenheim's Disease and Allied Conditions—B. B. Rowley, Neurologist to Milwaukee Children's Hospital.
12:25 A.M. Lunch.

Radiological Society to Meet

The next meeting of the Radiological Society of North America will be held at Toronto, December 2nd to 6th, inclusive. Headquarters will be at the Royal York Hotel. The facilities and accommodations at this hotel are the best in the history of the society and a banner meeting is expected. The scientific program, clinics, scientific and commercial exhibits will be of the highest character and exceedingly interesting and instructive. The program will be interesting not only to the radiologists but to the physicians practicing other medical specialties and general practice as well. A cordial invitation is extended to all physicians as well as radiologists to attend the Toronto meeting. Secure reservations at once through Dr. W. C. Kruger or Dr. G. R. Reid, 20 College Street, Toronto.

Postgraduate Lecture-Clinics in Northwest Wisconsin

The third series of postgraduate lecture-clinics sponsored by the State Medical Society and the University Extension Division was successfully launched the week of July 1st in six cities of northwest Wisconsin. As in the two preceding series, held in the north-central and southern parts of the state, prevailing opinion favored pediatrics as the subject to be considered.

The physicians enrolled at the several centers in the new circuit up to the time of the first meeting were the following:

Ashland—Drs. John Morris Dodd, Roll O. Grigsby, Geo. Wood Harrison, Carl O. Hertzman, Mathew S. Hosmer, Adolph Xavier Kamm, Clyde Jeffrey Smiles, Wm. Jos. Tucker, Melvin Leonard Young; Michael James Bonacci, Hurley; Fred Gordon Johnson, Iron River; Maurice John Lieberthal, Ironwood, Michigan; Hugh Fay Ringo, Montreal; Albert August Axley, Washburn. Meetings to be held Mondays, 8:00 a. m., at St. Joseph's hospital, Ashland.

Chippewa Falls—Drs. Eugene P. Ellenson, Clarence N. Hatleberg, Wm. Conrad Henske, Jos. H. Kelly, Francis Thos. McHugh, John David McRae, R. H. Ware, Rollin Schwartz; Ephraim H. Winter, Augusta; F. Hudek and Herbert Milo Trankle, Bloomer; Wm. Alexander Smith, Boyd; Robt. D. Cunningham, Cadott; Clifton A. Cooper, Colfax; Jos. H. A. Foster and F. Jos. Jones, Cornell; Fin Gerhard Anderson, Clarence H. Falstad, Frank C. Kinsman, John Edw. Ziegler and Dr. A. F. Haag, Eau Claire; Walter F. O'Connor, Ladysmith; Albert I. Haugen, Stanley; Hiram A. Buell, Weyerhauser. Meetings Thursday, 7:30 p. m., at St. Joseph's hospital, Chippewa Falls.

New Richmond—Drs. Joshua H. Armstrong and Otis Hoyt Epley; Wm. B. Cornwall, Amery; Clair R. Cannon and Emil G. Nylander, Ellsworth; Arthur E. McMahon, Glenwood City; Dr. T. O. Ries, Luck; Chas. Arthur Dawson, River Falls; Archibald Ford, Roberts; Hugh Conway, Spring alley; Henry E. Perrin, Star Prairie; Jake Arthur Riegel, St. Croix Falls; John Wm. Stuhr, Stillwater, Minn.; Julius Blom, Woodville. Meetings Wednesday, 7:30 p. m., at senior high school.

Rice Lake—Drs. Toussaint A. Charron, Drexel Lowry Dawson, Jos. H. Wallis, H. C. Wiger; Thos. Arneson, Almena; Clark Crandall Post and A. Galloway, Barron; Isaac Geo. Babcock and Simon Oscar Lund, Cumberland; Walter C. Andrews, Frederic; Gerhard Alfred Natvig, Prairie Farm; L. S. Brasted, Ridgeland. Meetings Friday, 7:30 p. m., at Elks' Club.

Superior—Drs. John Baird, John G. Barnsdale, Loran W. Beebe, Geo. Hall Conklin, Chas. Wm. Giesen, Anders G. Hovde, Adolph L. Kyllo, James Warren McGill, Patrick G. McGill, Thos. Jos. O'Leary, Frank Chas. Sarazin, Wm. H. Schnell, Donald Roy Searle, Henry Arthur Sincock, Arthur L. Weisgerber, Wm. H. Zwickey, C. H. Christianson; S. N. Letman and Clarence W. Taylor, Duluth, Minn. Meetings Monday, 7:00 p. m., at St. Mary's hospital.

Whitehall—Drs. H. C. Koch, Robt. Lee MacCornack, James C. Tyvand; J. S. Tenney, Alma; Herman F. Prill, Augusta; Elizabeth Comstock and F. T. Weber, Arcadia; Chas. D. Kelly, Clair; Peter A. Schulberg, Durand; Conrad Rogne, Ettrick; Jean Paul Reinhardt, Fountain City; George Christiansen,

(Continued on page XXVI)

THE JOURNAL BOOK SHELF

Diagnostis Methods in Internal Medicine. By Samuel A. Loewenberg, M. D., Assistant Professor of Clinical Medicine, Jefferson Medical College, and Assistant Physician to the Jefferson Hospital formerly Assistant Professor of Physical Diagnosis at the Medico-Chirurgical College and the University of Pennsylvania, Pa. With 547 illustrations, some in colors.

Diseases and Deformities of the Spine and Thorax. Arthur Steindler, M. D., Professor and head of the Department of Orthopedic Surgery of Iowa State University-Medical School, Iowa City, Iowa. With 76 plates. Cloth $12.50. C. V. Mosby Company, St. Louis, 1929.

The Tonsils and Adenoids and Their Diseases. Including the part they play in systemic disease. By Irwin Moore, M. B., late honorary surgeon to the London Throat Hospital for Diseases of the Throat, Nose, and Ear, Great Portland Street, and also to the Hospital for Diseases of the Throat, Golden Square, London. Cloth $6.50. C. V. Mosby Company, St. Louis, 1928.

Clinical Electrocardiograms. Their Interpretation and Significance by Frederick A. Willus, M. D. Section on Cardiology, the Mayo Clinic, Rochester, Minnesota, and associate professor of Medicine, the Mayo Foundation, University of Minnesota. Quarto of 219 pages with 368 illustrations. Cloth $8.00. W. B. Saunders Company, Philadelphia and London, 1929.

The Textbook of Clinical Neurology. For students and practitioners. By M. Neustaedter, M. D., clinical professor in neurology, N. Y. Polyclinic Med. Sch. and Hospital. With an introduction by Ed Fisher, M. D., professor emeritus of neurology, University and Bellevue Hospital Med. Col., N. Y. With 228 illustrations, some in colors. Price $6.00 net. F. A. Davis Co., Philadelphia, 1929.

Annual Reprint of the Reports of the Council On Pharmacy and Chemistry of the American Medical Association for 1928. Cloth. Price, postpaid, $1.00. Pp. 75. Chicago: American Medical Association, 1929.

New and Nonofficial Remedies, 1929, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistery of the American Medical Association on Jan. 1, 1929. Cloth. Price, postpaid, $1.50. Pp. 488; xlviii. Chicago: American Medical Association.

Edema and Its Treatment. By Herman Elwyn, M. D., Assistant Visiting Physician, Gouverneur Hospital, New York. Cloth $2.50. The Macmillan Co., New York, 1929.

An Introduction to The Study of Physics (Now for the first time published) by William Heberden (1710–1801) with a Prefatory Essay by LeRoy Crummer, with a reprint of Heberden's "Some Account of a Disorder of the Breast." Portrait in photogravure. Six illustrations. Price $2.00 net. Paul B. Hoeber, Inc., New York, 1929.

BOOKS RECEIVED FOR REVIEW

The Challenge of Chronic Diseases. By Ernst P. Boas, M. D., attending physician, Montefiore Hospital for Chronic Diseases, and Nicholas Michelson, M. D., adjunct physician, Montefiore Hospital for Chronic Diseases. Price $2.50. The Macmillan Company, 60 Fifth Ave., New York.

United Fruit Company Seventeenth Annual Report. Medical Department, United Fruit Company, Boston, Mass.

Physical Examination and Diagnostic Anatomy. By Charles B. Slade, M. D., formerly chief of clinic in general medicine, University and Bellevue Hospital Medical School, New York. Fourth edition, thoroughly revised. 12mo of 196 pages with 43 illustrations. Cloth, $2.00 net. W. B. Saunders Co., Philadelphia and London, 1929.

Clinical Aspects of Venous Pressure. By J. A. E. Eyster, M. D., professor of physiology, University of Wisconsin; associate physician, Wisconsin General Hospital. Price $2.50. The Macmillan Company, New York, 1929.

Transactions of the College of Physicians of Philadelphia. Third series. Vol. L. Philadelphia, 1928.

The Treatment of Fractures. By Lorenz Böhler, M. D., chief surgeon and director of the Vienna Accident Hospital. Authorized English translation by M. E. Steinberg, M. D., Portland, Ore. With 234 illustrations. Wilhelm Maudrich, Vienna, 1929.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Secretary, Mr. J. G. Crownhart, 119 E. Washington Ave., Madison, Wisconsin. These new books will be loaned for an inspection period only.

The Conquest of Cancer by Radium and Other Methods. By Daniel Thomas Quigley, M. D., instructor in surgery in the University of Nebraska College of Medicine; director of the Radium Hospital of Omaha. Illustrated with 334 engravings. Price $6.00 net. F. A. Davis Co., Philadelphia, 1929.

This book of 530 pages is a presentation of the author's experience and personal opinions on radium therapy of cancer. While the reviewer finds merit in the text he cannot subscribe to many of the author's views and beliefs. The experiences and opinions of recognized authorities in the field of cancer therapy are practically omitted and surgery, x-rays, and electro-thermic methods are not properly evaluated. There is no bibliography. There are numerous photographic illustrations, most of which are presented in the form of descriptive case reports. The author has added 64 pages on the radium therapy of non-cancerous conditions such as chronic ton-

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sillitis, goiter, eczema, and cataract, and, an appendix which does not appear appropriate, considering the title of the book, and which does not enhance its value because of its sketchiness and inaccuracies. H. R. F.

Youthful Old Age. How to Keep Young. By Walter M. Gallichan. With an introduction by Thurman B. Rice, M. D., Indiana University School of Medicine. Price $2.50. The Macmillan Company, New York, 1929.

This book is a rather sane outlook upon old age. It seems that old age is, so to speak, coming into its own, as within the last year or two there have been several books dealing with old age all developing the thesis that old age in itself is not a handicap, but may be made the most delightful season of the individual's life.

The author of this little volume is an Englishman, and some of his ideas are not altogether acceptable to the medical men of this country. He lays great stress upon so-called auto-intoxication and speaks of constipation as the worst disease in the whole category. His opening sentence to Chapter IX will explain best his attitude: "The disorder that causes most human diseases, shortens the span of life, and depresses the whole system is constipation." He has a very good chapter on Idiosyncrasy and yet as one peruses the book one cannot help but feel that the author might start first by taking the beam out of his own eye before he attempts to remove the mote from the other fellow's eye.

However, bearing in mind that one who writes such a book must necessarily ride a hobby, there is much that is sane and sound in the author's comments upon Sex Hygiene, Middle Age, Idiosyncrasies in general and other topics relating to Mental and Physical Hygiene in the later period of life.

Dr. Thurman B. Rice has written a very gracious introduction to the book. L. M. W.

Osteomyelitis and Compound Fractures. By H. Winnett Orr, M. D., chief surgeon of the Nebraska Orthopedic Hospital, Orthopedic Surgeon Lincoln General Hospital, Consulting Orthopedic Surgeon Bryan Memorial Hospital, Lincoln, Nebraska. Cloth $5.00. C. V. Mosby Company, St. Louis, 1929.

In the development of present day surgery the brilliant, original researches of men like Pasteur and Roentgen have advanced the science by tremendous strides. But there have been clinicians as well, whose daily observation of the progress of cases has led to keen thinking and the analysis of results. Without contributing anything new, they have yet done much to clarify our conceptions of pathology and treatment, and to establish the desirable and eliminate the undesirable in our methods.

To the latter type of investigators H. Winnett Orr belongs. His careful observation of the surgical material furnished by the great war has led to the formulation of a physiological and practical method for the treatment of osteomyelitis. The publication of preliminary reports of his plan of treatment interested only a handful of bone surgeons. The complete success of the method soon led to its acceptance, however, and more searching discussions of its mechanism ensued. In 1927 a masterly article appeared in S. G. O. Now this work has been enlarged upon and is presented in the monograph under discussion.

Dr. John Ridlon has added an introduction full of his charming anecdotes. He tells of his early acquaintance with Orr and with osteomyelitis and deals a few blows at over zealous and self important medics.

Orr follows this with five chapters of well presented facts about bone infection. There is a readable account of Lister, Pasteur, and the later actors in the drama of surgical infection. The historical background for the method of Orr is brought up to the time of the great war. Then the lessons taught in the "laboratory" of the war itself are presented by documents, tables, and incidents in the experience of the writer. The conflict of "position" vs. "wound" treatment of compound fractures is strikingly given.

The outstanding conceptions of osteomyelitis are then quoted from such authorities as Gallie, Murphy, and Senn. Extreme methods of treatment are presented in order to show their weaknesses. The good features of the classical methods are pointed out. Then the Orr treatment is presented and the value of "drainage and rest," illustrated by numerous cases.

The subject of compound fractures is similarly handled. The necessity of obtaining correct length, position, and immobilization is defended against all of the tenents of "pseudo Listerism." The use of fixed traction is illustrated to advantage. The value of efficient drainage is contrasted with futility of irrigation with antiseptics.

A final chapter of clinical results includes a summary of the Orr method. Contributed cases from such men as Gaenslen, Ellis Jones, Steindler, and Henderson are discussed. The excellent results in a variety of cases dispels any idea that success with the method is confined to a few clinics.

The book is an authoritative discussion for the student, a concise monograph for the orthopedist, and the simple exposition of a practical method for the general surgeon. H. C. S.

Principles and Practice of Electrocardiography. By Carl J. Wiggers, M. D., professor of physiology in the School of Medicine of Western Reserve University, Cleveland, Ohio. With 61 illustrations. Price $7.50. C. V. Mosby Company, St. Louis, 1929.

A very complete treatise on the whole field of electrocardiography presented in three distinct sections.

The first dealing with the general principles and procedures of electrocariography with the physics of the galvanometers and accessary systems of standard type of electrocardiographic apparatus are discussed.

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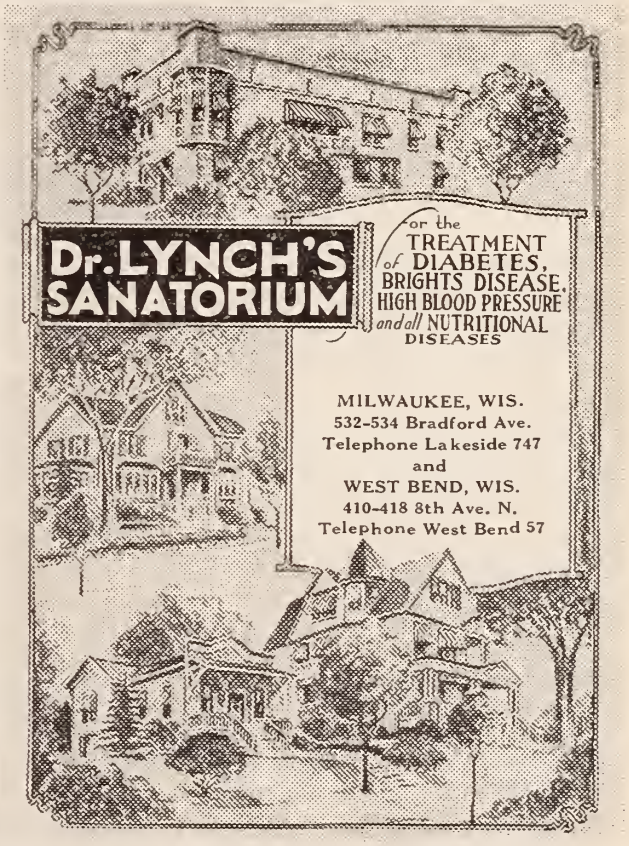

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The second explains the causes of the normal electrocardiographic deflections and their relation to physical and physiologic processes in the heart. It also analyzes the effect of abnormal cardiac disturbances on electrocardiograms.

The third consists of a series of abnormal electrocardiograms, pointing out the evidence of abnormality in each; discusses their significance in terms of clinical physiology and thus arrives at a diagnosis. This is followed by a brief discussion of the salient features discovered and of the treatment which has been given the stamp of approval.

For one who wishes to go into the theory and mechanism of production of electrocardiograms, as well as their clinical interpretation, this book is indispensable. M. F. R.

Gonorrhea and Kindred Affections. Gonorrhea in the Male, Chancroid and Verruca Acuminata by George Robertson Livermore, M. D., professor of urology, Medical Dept., University of Tenn., and Gonorrhea in the Female and Infectious Granulomata by Edward Armin Schumann, M. D., associate professor of obstetrics, University of Pennsylvania. Price $5.00. D. Appleton and Company, New York and London, 1929.

PART I

The author presents a brief but comprehensive review of the history and etiology of gonorrhea in the male. He presents the pathology and therapy in a clear and concise manner, stressing always methods which have proved most successful in his hands. The procedure is presented in detail, yet is very readable.

He also devotes a short chapter to the discussion of chancroid and verruca acuminata.

PART II

Gonorrhea in the female and the infectious granulomata is presented in a comprehensive fashion, without fatiguing case reports and too many extraneous references to the literature on the subject. He gives the essential data in logical sequence and also stresses therapeutic procedures which he has found most successful. N. W. B.

The History of Hemostasis. By Samuel Clark Harvey, M. D., professor of surgery, Yale University; surgeon in chief, New Haven Hospital. With 19 illustrations. Price $1.50 net. Paul B. Hoeber, New York, 1929.

Dr. Harvey presents an entertaining and instructive review of the development of hemostasis. In many respects the carrying of a single subject through the many phases of its development is more interesting than a section of all branches of surgery in a single period. The advances made in hemostasis from ancient times with the reason given by the various instigators of changes is enlightening. The progress from the cautery to the tourniquet, the era and the final development of sterile ligatures shows the difficulties encountered. The advantages of a locked artery forceps become apparent as surgery enters new fields of elective operations. The book is well worth while even for those who do not profess interest in the history of medicine. F. R.

THERAPEUTIC NOTES

New and Nonofficial Remedies

In addition to the articles enumerated previously, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories:
Viosterol—Abbott.

Benzol Products Co.:
Neocinchophen—B. P. C.

Dick X-Ray Co.:
I-X Barium Meal.

Parke, Davis & Co.:
Parke, Davis & Co.'s Viosterol.

E. R. Squibb & Sons:
Viosterol Squibb 100 D.
Squibb's Viosterol Cod-Liver Oil 5 D.
Squibb's Viosterol Cod-Liver Oil 5 D Mint-Flavored.

Terrell's Laboratories:
Rabies Vaccine Phenolized, Terrell.

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Isarol-Ciba.—Sulphonated Bitumen, N. F.—A preparation obtained by dry distillation of bituminous shale. The distillate is sulphonated with sulphuric acid and subsequently neutralized with ammonium carbonate. The product complies with the standards for sulphonated bitumen, N. F. It has the actions and uses of sulphoichthyolate preparations and substitutes (New and Nonofficial Remedies, 1929, p. 398). (Jour. A. M. A., July 6, 1929, p. 33)

Ampoules of Pitressin.—An aqueous solution containing the pressor and diuretic-antidiuretic principle of the posterior lobe of the pituitary gland (betahypophamine) containing less than 1 unit of oxytocic activity per cc. It is standardized by the method of Hamilton and Rowe so that each cc. contains 20 pressor units (1 unit represents the pressor activity exhibited by 0.5 mg. of standard powdered pituitary U. S. P.). This product is used for temporary stimulation of blood pressure, for increasing the muscular activity of the bladder and intestinal

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tract, also for anti-diuretic effect in diabetes insipidus. It is marketed in 1 cc. ampoules. Parke, Davis & Co., Detroit.

Ampoules of Pitocin.—An aqueous solution containing the oxytocic principle of the posterior lobe of the pituitary gland (alphahypophamine) containing less than 0.5 unit of pressor activity per cc. It is standardized by the U. S. P. method for pituitary, each cc. containing 10 International units. This product is used to stimulate uterine contractions for obstetric purposes. It is marketed in 1 cc. ampules. Parke, Davis & Co., Detroit. (Jour. A. M. A., July 13, 1929, p. 117)

Rabies Vaccine (Phenolized).—An antirabic vaccine (New and Nonofficial Remedies, 1929, p. 356) prepared according to the general method of David Semple (phenol killed). It is marketed in packages of 14 vials, each containing 3 cc., and in packages of 21 vials, each containing 3 cc. Terrell's Laboratories, Fort Worth, Texas. (Jour. A. M. A., July 27, 1929, p. 283)

Insulin-Squibb, 80 units, 10 cc. Each cc. contains insulin-Squibb (New and Nonofficial Remedies, 1929, p. 197) 80 units. E. R. Squibb & Sons, New York.

Diphtheria Toxoid. A diphtheria toxoid (New and Nonofficial Remedies, 1929, p. 368) prepared from diphtheria toxin of which the L+ dose is 0.25 cc. The toxin is treated with formaldehyde according to the specifications of the U. S. Public Health Service until it is detoxified. It is tested for antigenic power by subcutaneous injection into guinea-pigs. Diphtheria toxoid—P. D. & Co. is marketed in packages containing one bulb (0.5 cc.) of dilute diphtheria toxoid for the reaction test and two bulbs (0.5 and 1.0 cc. respectively) of diphtheria toxoid; also marketed in hospital packages. Parke, Davis & Co., Detroit.

Petrolagar (with Milk of Magnesia). Liquid petrolatum (New and Nonofficial Remedies, 1929, p. 228) 65 cc.; magnesia magma, 8 cc.; emulsified with agar in a menstruum containing sugar, flavoring, sodium benzoate 0.1 Gm., and water to make 100 cc. Petrolagar Laboratories, Inc., Chicago. (Jour. A. M. A., June 1, 1929, p. 1837)

Bismarsen. Sulpharsphenamine Bismuth. Bismuth Arsphenamine Sulphonate. The sodium salt of a bismuth derivative of arsphenamine methylene sulphonic acid with inorganic salts. It contains approximately 13 per cent of arsenic and 24 per cent of bismuth. Bismarsen is used in the treatment of syphilis. The drug is reported to be somewhat slower in its action than intramuscularly administered sulpharspenamine or intravenously administered neoarsphenamine, but much more rapid than bismuth. More or less severe pains at the site of injection have been reported. Bismarsen is administered intramuscularly. Abbott Laboratories, North Chicago, Ill. (Jour. A. M. A., June 8, 1929, p. 1928)

Digifoline-Ciba. A digitalis preparation containing the active glucosides of digitalis, free from extractive matter. It is standardized to have the strength of digitalis leaves as standardized by the frog method of Focke. The actions and uses of Digifoline-Ciba are the same as that of digitalis. It may be administered orally, rectally, or by subcutaneous, intramuscular or intravenous injection. Digifoline-Ciba is marketed in the form of Ampules Digifoline-Ciba Solution, Digifoline-Ciba Liquid and Tablets Digifoline-Ciba. Ciba Company, Inc., New York.

Concentrated Pollen Extracts-Swan-Myers. In addition to the products listed in New and Nonofficial Remedies, 1929, p. 26, the following product has been accepted: Canada Blue Grass Concentrated Pollen Extract-Swan-Myers. Swan-Myers Co., Indianapolis.

Sulpharsphenamine-Searle, 0.1 Gm. Ampules. Each ampule contains sulpharsphenamine-Searle (THE JOURNAL, April 20, 1929, p. 1349) 0.1 Gm. G. D. Searle & Co., Chicago.

Postgraduate Lecture-Clinics

(Continued from page 445)

Galesville; Charles Peterson, Independence; J. W. Lowe, Merrillan; Oscar Knutson and Robt. Nels Leasum, Osseo; C. D. Beebe, Sparta; P. J. Wieg, Strum; Anthony Domine, Taylor; P. A. Mattison, Winona, Minn. Meetings Tuesday, 7:30 p. m., at MacCornack clinic.

At each city in the circuit Dr. Alexis Hartmann gives the first six lectures on infant care and feeding, using a text by McKim Marriott. Dr. Francis Scott Smyth follows with six lectures on children's diseases.

It is proposed to offer postgraduate lecture-clinic service on other subjects and in other circuits of the state as the demand warrants. The executive and advisory committee is composed of Dr. Karl W. Doege, Sr., Marshfield, President of the State Medical Society, Dr. C. R. Bardeen, Madison, Dean of the University medical school, Dr. J. S. Evans, Madison, Professor of Medicine, University medical school, George Crownhart, Madison, Secretary of the State Medical Society, Chester D. Snell, Madison, Dean of the University Extension Division, Dr. M. D. Bird, Marinette, Dr. Otho Fiedler, Sheboygan, Dr. Karl H. Doege, Jr., Marshfield, Dr. R. L. MacCornack, Whitehall, and Dr. J. F. Wilkinson, Oconomowoc.

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State Medical Society of Wisconsin, 1930

Born in Milwaukee in 1877, Dr. Gaenslen attended the public schools, receiving his Bachelor of Science degree from the University of Wisconsin in 1899. He completed his medical course at Johns Hopkins in 1903 and served as interne and resident physician, from 1903 to 1906, at German Hospital (now Lennox Hill Hospital), New York City.

Dr. Gaenslen returned to Milwaukee to establish a general practice in 1906. Six years later he established his present specialty of orthopedics. He is now Professor of Orthopedic Surgery at the University of Wisconsin and a member of the American College of Surgeons and the American Orthopedic Association. He has long been a member of the Milwaukee County Medical Society, the State Medical Society of Wisconsin and a Fellow of the American Medical Association.

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Preventive Medicine.*

By FREDERICK J. GAENSLEN, M. D.,
Milwaukee

My first duty, and I may say my great pleasure, will be to express the deep gratitude and the sincere appreciation felt on being called by you, to the high office upon which I am entering. Let me assure you that whatever ability I may have will be put forward to serve the society faithfully and loyally during the coming year.

The subject of my inaugural address, "Preventive Medicine," is one which has perhaps as wide an appeal as any in the entire field of medicine. It touches every specialty and every individual in that specialty.

In a general way our duties as physicians are to relieve suffering and to prolong life, in other words to guard the health or to restore the health of those entrusting themselves to our care. It requires no stretch of the imagination to realize that the highest fulfillment of this obligation will be reached in the prevention of disease and suffering, and of mental and physical disability.

The idea of prevention, while stressed especially in modern times, is by no means new. It may be said to be as old as medicine itself and a great deal older than many of the earlier legitimate medical practices, since mystic religious ceremonies designed to ward off evil and to exorcise the evil spirits supposedly responsible for disease were in vogue in the earliest periods of recorded history. There is a popular belief that the Chinese people compensated their physicians to keep them well. This is preventive medicine in a true sense, though it is difficult to determine whether this principle was initiated by the laymen desiring to keep well or by the physicians themselves.

From these early beginnings to the present time preventive medicine has demanded an ever increasing attention since it was obvious that it is easier to prevent, than to cure disease. In general the physician himself has been the moving spirit in the education of the people to the benefits accruing from preventive medicine. The generous attitude of the physicians in this regard is practically universal and the public is coming to expect it as a matter of course.

Much progress has been made. In the lifetime of many of those here present profound changes have taken place in medicine. The typhoid wards, common in many hospitals in my student days are now a thing of the past. Three decades ago, in the larger hospitals, the student had the opportunity of seeing within a short space of time the great majority of the various complications of this dreaded disease. Now he is fortunate if he can establish a superficial acquaintance with it, supplementing his meagre bedside knowledge with textbook descriptions of the varying forms. This change has been brought about by the discovery of the cause of the disease, the mode of transmission, attention to water supply and in a large measure, by the education of the public in the commonly employed protective measures, including the use of typhoid vaccine. The more enlightened public is now demanding this protection on suitable occasions.

Tuberculosis, thirty years ago "Captain of the men of Death", is now crowded into seventh place in Wisconsin, and here again the education of the public, to secure advice at the proper source and at the proper time, has been the lever by which these results have been accomplished. We may well be proud of such a record and bow to our colleague, Dr. Hoyt Dearholt, for his large share

* Inaugural Address of President-elect, 88th Anniversary Meeting, State Medical Society of Wisconsin, Madison, Sept., 1929.

in this program and in the results which have attracted attention far beyond the borders of our state. It has been well said, that the tuberculosis movement was the pioneer popular health movement, that paved the way for all the others that we know, such as the campaigns against needless infant mortality, cancer, heart disease, prevention of blindness, better maternal care, etc. Frequent comment has been made in late years, on the relative infrequency of tuberculous involvement of glands of the neck. In the larger surgical clinics thirty years ago, excision of tuberculous glands of the neck was seen almost daily on the operative schedule. Today the student rarely sees a dissection of the neck for this purpose. This is due in part to the general campaign against tuberculosis, including the pasteurization of milk and in part also to a recognition of the tonsil, as an avenue of infection and especially to the fact that the public has learned that diseased tonsils in childhood are a menace and that removal of the tonsils, when diseased is feasible and desirable.

In my own field also, that of orthopedic surgery, changes are being noted in the incidence of certain conditions. It is interesting to note that rachitic deformity requiring operative correction, is much less frequent now than it was even twenty years ago. This is due in large measure to the proper feeding of infants and to the spread of the knowledge, that sunshine and vitamine rich foods, are the most efficacious protective measures.

It has been observed further that the occurrence of osteomyelitis is less frequent than it was formerly. This is probably attributable in considerable measure to the fact that minor infections are now considered by the layman as potential for harm and therefore deserving of careful attention.

The application of local antiseptics as protective remedies in superficial abrasions, infected blisters and the like has become routine practice in many homes. That these minor lesions were factors in causation of serious bone infection, has been known to physicians for a long time, but it is only when the knowledge filters through to the public, that the benefits of preventive medicine by proper attention to these minor conditions result in the prevention of serious disease.

CONTAGIOUS DISEASE GROUP

In the contagious disease group very considerable progress has been made. It is fair to assume that the incidence of small pox and diphtheria may be still further cut down by insistence on vaccination and immunization on a still larger scale. In other diseases such as scarlet fever, chicken pox and measles, studies have been sufficiently encouraging to let us hope that methods of protection will soon be developed to justify their more general use. These are but a few of the changes which can be noted as having taken place within the last few decades. They could be multiplied many times.

Much remains to be done. From what has already been said, it has become evident again and again, that the education of the public is the keynote in preventive medicine. The public must be educated that diagnosis is essential to cure and that the earlier the diagnosis the greater the opportunity for cure. Exact diagnosis can best be made by men properly qualified. It would seem that the efforts of the medical profession would entitle it to the fullest confidence of the laity. It would also seem reasonable that this confidence be denied the practitioners of the various cults, of which a new one springs up, to take the place of each succeeding failure. The average layman does not stop to think that aside from a few empiric remedies, stumbled upon by the medicine men of early days, the treatment of disease is based upon careful study of anatomy, gross and microscopic, of the body, of physiology, the working of that body, of pathology, the structure in disease, and of pharmacology, the study of the action of drugs on that body. He does not stop to consider that prevention of many of the dreaded epidemics has been the result of painstaking work in the laboratory by men well grounded in these basic sciences. The enumeration of the advances already made and of the striking benefits to mankind should be sufficient to remind the thinking man that solutions of unsolved problems in

disease may be expected from similar sources. The efforts thus far have borne abundant fruit.

THE BASIC SCIENCE LAW

And yet we find people of intelligence consulting unscrupulous or ignorant practitioners of the various cults. While on a recent European visit I was interested to learn of a new cult which we could confidently expect to observe at closer range, as the chiropractor is preparing to leave the stage, had not our late and lamented Dr. Otto Bock blocked the way with his basic science law. This new cult is based on the partial truth that the eye discloses unmistakable signs of disease. They generalize, however, and instill into the gullible public the belief that every disease is recognizable to the true expert, by the expression of the eye or in changes in the eye grounds, for the detection of which the skillful manipulation of the ophthalmoscope is necessary.

It was my pleasure to discuss this new system with the wife of a publisher who had been treated for an abdominal condition by a regular physician. She grew impatient however, and summoned the eye doctor, who after an ophthalmoscopic examination, diagnosed the presence of two gallstones, one of which had passed, the other just starting on its journey down the cystic duct. Upon administration of a special remedy the patient felt greatly relieved, only to have her symptoms continue in orderly manner the following day. From these observations it would seem that our countryman Barnum's saying, that the American public wants to be "humbugged", must be modified to include the inhabitants of the other hemisphere. We in Wisconsin and the few other states which have adopted the essentials of the basic science law will feel like placing a wreath on the grave of Otto Bock, of beloved memory, for his efforts in guarding our public health.

Admitting that there is much further work to be done how will the problem be attacked? One important phase will be that of the research worker. He brings in the new facts and develops new methods. He may discover the cause or the mode of transmission of some disease previously poorly understood. He may develop some form of protection against a disease the treatment of which is unsatisfactory. Again his work may deal with some form of physical agent and its application in medicine. This work is of a high order. It requires genius. Only a few of the rank and file of the profession will be fitted by natural ability, training, economic status and opportunity to undertake work of the character we have in mind here, and among the few, fewer still will achieve the goal of contributing something to medicine of great potential value in the field of prevention. This work will usually come from well equipped, well financed laboratories such as are found in our larger universities and private clinics, though we must not be unmindful of the fact that the doors are not closed to those more humbly situated. The discovery of the tubercle bacillus by a poor country practitioner, with but meagre facilities, would not let us forget this.

While we can not all be research workers or leaders on the front line in the advancement of knowledge, we can be leaders in our respective fields of activity, in bringing to our patients the fruits of the front line workers. The work of the rank and file, as already indicated, must be the putting to use the findings of the research worker. This is the second phase, the putting to use the information gathered by the advance guard. In the carrying out of this phase, enlightenment of the public is of prime importance. This may be furthered through the press or radio, perhaps under guidance of publicity committees of the medical societies, through health talks before various groups, through further developing and improving courses in public health and hygiene, not only in schools and higher institutions of learning, but more important still, in the medical schools bringing out in our teaching the importance of preventive medicine, as opportunity presents itself, so that the young physician may realize his opportunity and his responsibility.

OUR OPPORTUNITIES

But what remains for the average man in the profession to do in this program of preventive medicine? He represents the most

important link between the fund of present day knowledge and the patient in need of the application of this knowledge. His best work and his most efficient work will be accomplished through the direct contact with his patients. His opportunities are great if he will but realize them.

His first duty perhaps will be to keep abreast of the times by reading, by attendance at medical meetings and especially by travel. I know of no more pleasant and easy a way of acquiring knowledge and stimulation to better work both in a practical and scientific way than travel. In addition there is opportunity for comparative rest, at any rate relief from the daily routine and responsibility. Ochsner was in the habit of advising his assistants to spend at least four weeks out of the year in study away from home. This rule if followed through the years can not fail to bring rich returns in many ways. Keeping abreast does not mean that we must be the first to adopt new lines of thought and practice. It is usually well to give new methods time to season and especially to give them time in the hands of the few who are perhaps best equipped to try them out. The older men here will remember the great "to do" about the determination of the opsonic index of the blood as a control in vaccine therapy. The words sound strange even to us and mean still less to the younger man. We heard a good deal about cryoscopy about the time I graduated in 1903, as a help in diagnosis. These words have ceased to have meaning in clinical medicine. Perhaps it will be so with the sedimentation test. We do not know as yet, but we are perfectly willing to abide our time and to learn more of its use when it has been proven of value by those in good position to determine its usefulness.

You would all enjoy, I am sure, reading Wilson's biography of Sir James Mackenzie, the noted English heart specialist. In this interesting book, concerning a master clinician, we are constantly reminded that, though he devised the so-called Mackenzie ink polygraph, he was insistent that clinical observation and experience weighs far more heavily in the balance than the information obtained in the laboratory and through the use of complicated apparatus. We are not decrying these methods by any means, but we do feel that reliance on careful clinical observation, especially if backed by good clinical experience, is surely of far greater importance and that we will do well to keep our ears and eyes and fingers trained so that we may continue to place our chief reliance on these.

Sir William Osler was fond of impressing his watchword upon us, "Do each day's work well and don't worry about the future". This may be translated into the golden rule to guard the health of our patients as we would that of our own families. This is very inclusive. It implies broad principles as well as attention to minute details. It means the dropping of silver nitrate into the eyes of the new born, the immunization of the growing child against the contagious diseases, it means a throat culture, perhaps the immediate use of the microscope to decide between a tonsillitis and a diphtheria as a life saving measure. It means careful routine examination. A snap diagnosis and prescription may be permissible now and then, but when symptoms persist careful routine examination, including the tried laboratory tests, must be insisted upon. It has been thought wise by many to approach the resistant patient as we would a new patient coming in for the first time, retaking the history and going through the routine again, in the hope of uncovering additional data. The public is quick to appreciate careful painstaking work and as a rule to accept the doctor as the family counselor. In this capacity the doctor will have a rare opportunity to educate his people to accept the benefits of preventive medicine so far as available at this time. Word of mouth advice from an esteemed counselor is more productive of results than any quantity of literature. The physician of experience, knowing his patients, their general tendencies and habits, will be quick to discover when an examination is necessary and what particular line of investigation is to follow and will in the great majority of cases direct this examination along the most fruitful lines. Better still, if he can influence his patients, to submit to periodic health

examination so ably advocated by our former President, Joseph Smith. You may ask how is all this related to the subject of preventive medicine. The answer is simple, that curative medicine is in fact preventive medicine in the fullest sense of the word. According to reports, our greatest mortality in this state today is from (1) diseases of the heart and circulation (2) cancer (3) cerebral hemorrhage, (4) Bright's disease, (5) diabetes. They are the so-called silent sicknesses of middle age. If we improve our opportunities as they present themselves and educate the public to the need of early consultation and examination, keeping in mind especially the diseases enumerated, much may be done through regulation of habits of eating and drinking, of rest and play, through surgery or other means of materially increasing the average life expectancy, to relieve suffering and disability and to add to the joy and usefulness of the lives of those entrusting themselves to our care.

The Form of Disease; Its Clinical Picture and the Individual.*

By K. W. DOEGE, M. D.,
Marshfield Clinic, Marshfield

The title I have chosen for my address today suggests three distinct ideas or conceptions, the form of the disease, the clinical picture it presents and the individual. It is my intention to dwell upon some of the relations existing among the three and to especially point out the individual's influence upon the form as well as upon the clinical picture of a disease that may affect him. So that there be no doubt about the terms used I shall discuss them to a certain extent. Not that there is anything difficult in their meaning, but that we may understand them alike and leave no doubt as to what we are speaking about. The diseases I propose to mention in connection with these terms will be such as we all have come in contact with and which we have met in general practice. As an example take pneumonia. The form it may take in patients is not always of a standard type. An inflammation of lung tissue takes place. In some, the process of consolidation involves a whole lobe, croupous pneumonia; in others it affects several lobes of one or a lobe in each lung, double pneumonia. At times consolidation takes place not of a whole lobe but of a number of small patches of lung tissue, bronchial pneumonia. These forms of pneumonia usually are demonstrable by auscultation and percussion and, if death occurs, may be visualized at a post mortem examination.

Take another disease, tuberculosis. The form it may take depends to some extent upon what tissue it involves; a fact familiar to every one. We need but to allude to such types as the pulmonary, glandular, osseous, peritoneal, pleural, pericardial, meningeal, skin, etc. It is not surprising that the appearance should vary with the tissue affected. However, if we consider but one kind of tissue, i.e., the pulmonary, the diversity of form tuberculosis will assume in different individuals is just as pronounced. We need but visualize the gross appearance of the apical, the miliary, the cavernous, the fibrous, the unilateral and the bilateral pulmonary tuberculosis to be struck by the variety of forms it may assume. The same holds true for tuberculosis of the kidneys, the bones, and of the skin.

As a third example I wish to mention nephritis, a disease not depending so much upon direct bacterial invasion as upon the harmful effects upon the kidney substance by toxins in the blood. The various forms of nephritic involvement, such as acute or chronic, with acute exacerbations of the latter, tubular or glomerular, and with combinations of the two we are well acquainted.

I believe that these examples will make clear what I mean when I use the term "disease-form."

Asking ourselves what produces this variance in form, it is not likely that the directing force that determines this lies in the disease itself, as it does lie in the kernel from which the plant grows. It is more probable that the individual affected, his age,

* President's Address, 88th Anniversary Meeting, State Medical Society of Wisconsin, Madison, Sept., 1929.

his state of development, his condition of health, his constitution and many other things are the determining factors. Considering pneumonia, we recall that the lobar form of pneumonia occurs in the robust and healthy adults; the lobular pneumonia oftenest in children and the less vigorous. Inquiring similarly into tuberculosis we are as much struck by the great preponderance of the pulmonary form in the adolescent, of the glandular form in the young and weak, of the meningeal type in infants and children, of the abdominal type in young adults, as we are impressed by the comparative absence of all forms of tuberculosis in people of advanced age. While the primary focus of infection may be a determining factor in the ultimate form of the disease, something found in the individual, something which we call predisposition, lack of immunity, something peculiar to the person affected, plays just as important a part.

Consider nephritis. Some children go through an infection of scarlet fever or diphtheria without any lasting damage to the kidney. In others, a severe nephritis is the result. Nephritis is due to a toxic irritant, still, whether we know this irritant to be bacterial, metabolic or chemical in origin, the nature of the toxin does not determine the form the nephritis will take; that decision is made in the individual, in the person himself.

Consider, also, hypertension. It is not a disease, it is a symptom, but for purposes of demonstration let us consider it. No matter whether you think of it as toxic or psychic in origin; if present, we are unable to foretell whether it will cause a chronic nephritis, an apoplexy, cerebral softening, cardiac decompensation or what not. Just where its damaging effect will make itself noticeable, also, depends not upon the hypertension but upon the person and his mysterious individualistic inner makeup.

To cite further examples would serve no purpose. There are many, but again and again it is always the person, the individual affected, that determines the form the disease must take. While thus the individual is so important and conspicuous a factor in deciding the course a pathological process will follow and the form it will assume, the influence of the person upon the disease, extends still farther and is especially noticeable when it comes to shape the clinical picture the disease will present.

THE CLINICAL PICTURE

The textbooks, especially the older ones, will furnish you with a standard description of the symptomatology of a particular disease. On reading these descriptions one almost gets an idea as though disease puts a stamp, its imprint upon the human being. This stamp for this disorder, that for that; as though disease were a formed, a tangible thing, something with life and individuality. That would be harkening back to the old conception of its being a demon. At one time this thought had some justification, when we recall those wide-spread older infections like small-pox, pest, spotted fever and cholera, those scourges that killed everything before them without discrimination. Even now such isolated cases of quickly fatal infections are seen where the advent of disease and death follow each other in close sequence, giving the impression of demonic power. It allows the individual no time to resist and assert himself or form a clinical picture that admits of interpretation. I have seen a case of acute osteomyelitis in a five year old boy where the disease started and ended in death within three days. Osteomyelitis was supected though not acted upon before death. Disease form and clinical picture in those instances are very simple and elementary, the individual and his reaction are quite in the background. One might say that there is no reaction to the damage going on. He succumbs unfailingly and quickly, almost as though at an explosion he is blown up into the air. Such conception of disease looks upon the patient as quite passive; he is only a target that is hit; he is simply a sufferer, disease doing with him as it will. While we do no longer hold to those ideas about sickness, we still in our speech continue the habit and speak of disease in terms as though it creates the clincial picture in the individual. We know now that the patient when affected does not merely suffer and endure, but that he re-

sists disease, defends himself against it, and that his particular effort of defense constitutes the symptoms his clinical picture.

THE INDIVIDUAL

The conception that it is the individual who produces the clinical picture is far more illustrative and productive of thought and of therapeutic suggestions and comes nearer the truth than the idea that it is the disease that stamps its picture upon the individual. The disease picture is simply a consumation of the efforts by the patient against the irritant, and these efforts will be as varied as are the individuals in their makeup, constitution and power of resistance. It is a fight and no two fights were ever alike. Considering the many differences in individuals as are found by reason of age, sex, race, state of nourishment and fatigue, nervous systems, mental makeup, character, education, functional activity of the various glands of internal secretion, under development of organs, varying degrees of immunity and many others, it seems a uniform picture of disease for all individuals must be an impossibility. With these facts in mind we are quite prepared to accept and understand that there are wide variations in the symptomatology that a certain disease may present in different persons.

Or, expressing it in terms as I would suggest, we are quite prepared to understand that patient A, because of the differences in individuality, must develop a clinical picture quite different from patient B. A, a healthy robust young man with pneumonia, has a chill, high fever, he coughs, has pain and bloody expectoration and a florid appearance: while B, an old person also with pneumonia, may have no chill, no fever, may never cough nor have pain or bloody expectoration but looks exhausted and depressed. These pictures are extreme but not at all uncommon and in between these extremes we have many shades of similarity and dissimilarity accordingly as the types of persons approach or diverge from one another. One patient has typhoid fever with diarrhea and cough and many rose spots, another is constipated, has no cough and no rose colored spots. One has scarlet fever and looks as red as a lobster, another has a rash so faint that it can hardly be seen and diagnosed. One case of Graves' disease excels in tachycardia, another in muscular weakness, a third in nervous symptoms and a fourth in exophthalmos, a fifth has several or all of these symptoms.

One could multiply these examples by the hundreds but it is not necessary. They are facts and truths that are known to all practitioners, were known to physicians thousands of years ago, and we find them mentioned and the importance of the person, the individual emphasized in the writings of Hippocrates and of other Greek and Egyptian physicians. The person affected, the individual, is the important thing to the physician, not only as to the form a disease may take, but, also and especially, as to the disease picture he represents. It is quite necessary that this should be recalled to our minds, especially now when our thoughts regarding disease are directed and controlled by an almost purely mechanistic trend of thinking along the lines of organ pathology alone. The progress of medicine of which we so justly boast, has celebrated its triumphs in the better and more minute understanding of the function and dysfunction of organs, in a vastly better knowledge of the anatomy of organs in health, as well as in disease. The revelations of the dissecting room, of the research and clinical laboratory, have led us onward to a breathless pace and to almost dizzy heights. From the knowledge we now possess of each organ, it would seem that their mysterious functions are being laid bare to us more and more and that complete understanding may some day be within our reach. So we will still hotly continue to pursue the phantom of organ physiology and pathology, eliminating any other line of thought, trying to arrive at a definite delineation of the functions of an organ in health and in disease. The research work done on animals has been of great assistance and the results obtained we have often applied to the human being. We have learned a good deal about animal organic function and have assumed that the human organs would act alike. That this is an error we know. Animal organs and human organs are not

alike and do not function alike and deductions drawn from the assumption that they are alike are fallacious and misleading. Even like organs do not act and react the same in all human beings. We, also, know to our disparagement that the same organ in the same individual will not always function the same at all times and hours. There is no strict standard of function for an organ, a function that unless it is so and so, it is not normal, not healthy. We must allow of the widest variations of function in normal organs and we also must realize that a gland activity fitting well into our conception of what is standard may be found in organs that in reality are not healthy but are diseased. The estimation of functional activity when expressed in numerals and in figures is dangerous and its acceptance misleading.

The recognition of these facts and a distrust of the laboratory and hasty interpretation of its findings has always existed in the minds of eminent clinicians and has continued to exist throughout this period of intensive study of organic disease and function. This doubt still exists and has resulted in the frequently and well known expression that if the laboratory findings do not agree with your clinical judgment to disregard the former. Gastric acidity varies, kidney function changes, heart action changes, though the conditions under which the organic work is performed are alike. The same kind of food put into the same stomach but on different days will not be digested in the same manner each time. We need but think of the influence of the nervous system generally and of the psychical influence on digestion in particular to understand that. The percentages of gastric acidity vary so much as to be practically useless as an aid in the finer differential diagnoses. The kidney function test, the liver tests, the tests for cardiac efficiency when expressed in figures are reliable and dependable only in the smallest percentage of cases.

Bearing this in mind we are, with a sense of disappointment and regret, tempted to doubt the thought that the purely mechanical, anatomical, chemical, and biologic study of organ pathology and function is the only route to further progress in medicine. Looking backward upon the wide avenue of progress medical research has made, we notice the splendid edifices of new knowledge erected on either side and we feel pride and admiration. But when we look forward, doubt and worry may creep upon us, knowing or suspecting that organ pathology and physiology perhaps is not all, that the laboratory alone may not solve for us the entire problem. Does progress in medicine lie exclusively along the line we have so persistently followed during the past decades? Shall we continue to study still further the organs of the genus man, that is, ascertain what is genotype? Or shall we not, also, in view of what has been said concerning the influence of the individual upon disease form and picture, investigate and lay bare the phenomena each individual possesses that are peculiar to himself, are distinctly his own? Shall our study be not merely genotype but phenotype in addition?

If this is desirable it would mean the entrance of the individual into the medical curriculum as an object worthy of intensive study. We feel it to be a fact that to the practicing physician man, the genus man, means nothing, he has for him no special interest. Yet it is man in general that he has been studying exclusively and all the time. He, the physician, the practitioner, never deals with man in general. It is always the individual that concerns him. The medical scientist will look upon a patient as one of the genus man. The physician will be interested in him as an individual exclusively, forgetting man in general. He begins to analyze the personality of the patient the moment he comes into his presence and continues to do so, often unconsciously, while he listens to his complaint and examines him. He balances in his mind what is phenotype, i.e., peculiar to his patient, against what is genotype, common to all. He constantly ponders the problem how much of the patient, of his body and of his mind takes part in his complaint, in his disease. To arrive at this, the difficulties may be great. Consider the cerebrospinal, the sympathetic, the parasympathetic nerve

connections of our organs, the regulatory action of the internal secretions. How, because of these, organic functions in health conform in degree and time, stimulate or impede, rest and start anew, sympathize, interlock and even substitute one for the other. How defective function, because of disease of the heart disturbs the kidneys, the lungs, the liver, the gastro-intestinal tract, the brain. How a nervous system, especially sensitive because of heredity and constitution, will exaggerate an effect far beyond a comparatively simple cause. A familiar and often quoted example is the small fish bone in your throat. One can get used to it, others sense the presence of it all the time. The disagreeable sensation becomes more pronounced and finally unbearable. The individual is restless, alarmed, and all his thought is centered upon the speedy removal of the tiny object. Whether will power and energy will rule eventually depends upon his mental discipline and character. There are people that will succumb speedily to these abnormal sensations and to get rid of them will do things reasonable and unreasonable, good or bad, are willing to pay the price of happiness in their frenzy. Thus, personality will form and shape disease influences and alter its picture in mild affections as well as in grave diseases. Considering the relatively limited number of diseases that can befall man, it is a source of surprise, how older physicians constantly meet with new forms and pictures when one would think that in reality repetition should be the rule.

STUDY OF RELATIONSHIPS ESSENTIAL

The entrance of the individual as an object demanding close study for the purpose of further progress in medicine means the introduction and establishment, not only of psychology, but also of the study of the relations of the individual's entire life, of what has happened to him before and is happening now, as being on an equality with the study of the natural sciences, of anatomy, physiology and pathology in forming the foundations of medicine. So far the psychiatrist alone has utilized psychology and that only in cases of mental affections. A broader application and usefulness of the mental sciences by the physician is eminently necessary and a study of the individual psyche is of prime importance to understanding how the personality influences disease form and alters disease picture, and, in the light of that, aid in correct diagnosis.

The far reaching influence of the conscious mind plus the effect of the unconscious, of what lies buried as unrealized desires in the patient's psyche, the flow of unrevealed urges, the recognition of Friederich Krause's[1] "Tiefenperson," the hidden or depths-personality, are phases of the individual's make up worthy of the most intense study and go full length in explaining the variability of the clinical picture in different individuals.

I do not know to what extent the study of personality will ever become a discipline in our medical schools. I do know that it should occupy a prominent place. The rational part of it, such as is to be explained by the functions of the nervous system and by the action of internal secretions will probably find no difficulty. But when it comes to the irrational things, that of the soul, things that we can only suspect in the form of vague urges, and, when it comes to uncovering the wanderings of the mind in long forgotten tracks we may have difficulty in providing for the study of the individual a proper place in the curriculum of our medical schools and a willing reception even among physicians. The strictly scientific biologically thinking medical man may want nothing of it. And yet often the unreasonable, the irrational in the individual, affects the patient just as much and often more than the organic disease.

But let him that wants nothing of it try his purely biologic science on his patient in practice. That he will not get far he will soon find out. And when, because of this and for the sake of success, he stoops to things not of pure science, to the irrational, he may sense it like a blotch upon his scientific conscience. But he is wrong and need not blush for it is only when the scientifically trained man enters with his patient into complete understanding of his physical and mental life, into the rational as well as the

irrational, that the doctor becomes that great specimen of humanity, the true physician.

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Medical and Dental Aspects of Focal Infection.*

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My subject is a rather shop-worn one, but one that deserves no end of study by both the dentist and physician. If we are going to serve our patients as we should, focal infection must be eliminated as an etiological factor in the majority of diseases. I do not think all diseases are due to focal infection, but I do think the principal has been well established and that not enough thought is given to it by either branch of the healing art.

The voluminous medical and dental literature bearing upon the subject is sufficient evidence that considerable thought is being given the subject by the best brains in the country. Many medical puzzles have been solved by the developments in this field and dentistry has been lifted from the mechanical art of preserving teeth to that of a branch of medicine, vitally interested in preventing and curing systemic diseases.

In a few diseases, especially arthritis and muscular rheumatism, focal infection is usually investigated but in many other diseases it is usually overlooked. It is this lack of thoroughness that makes one physician fail to get results while his thoughtful and thorough colleague cures the patient. How many consider focal infection in spastic colitis, ulcers of stomach and duodenum, cholecystitis, appendicitis, endocarditis, the purpuras, the erythemas, chorea, pyelitis, nephritis and a few others?

Now, where do these foci lie? The results of different observers vary greatly, but an average shows about 60% in the teeth and the balance in tonsils, sinuses, and prostate in the male or cervix in the female. Therefore, this subject behooves all of us to get our noses together and co-operate to help the suffering public.

That the teeth do so much damage does not mean wholesale extraction in hopes that we find the right one. Nor does it mean, when we meet one of these stubborn diseases, that the teeth are the only sources to be investigated. How many cases I repeatedly see that have all their teeth out at the advice of a physician or one of our large clinics only to find no improvement and that stubs of tonsils from a poor tonsillectomy, ethmoid or sphenoid sinus infection is the offending focus.

Confining our attention to the teeth, now, which are the offenders? First in importance, devitalized teeth; second apical abscesses; third, and least important, pyorrheal gums. This sequence of importance is adequately substantiated by careful experimental work of Rosnow, Haden and others as well as by careful clinical studies.

There still exists a few dentists and physicians who do not believe in the principle of focal infection. There is a larger group who accept it but who either pay very little attention to it or judge a possible focus in a very compromising way. Finally, there is a group who really study their patients' problems with full respect for focal infection. It should be the goal of everyone of us to belong to the last group if we are going to give the best service to our patients and make use of modern scientific advances.

How are we going to accomplish this ideal? First, by careful study of the principles involved. Second, by unselfish co-operation between the physician and dentist. Third, by the dentist preventing the development of foci which so often follows certain procedures done unscientifically or in presence of poor asepsis.

The ideal examination of the teeth for foci should include (1) radiogram of all teeth and the gum where teeth have been removed; (2) careful testing of the teeth for

* Read before the joint meeting of the Northwest District Dental Society and Eau Claire and Associated Counties Medical Society, May 15th, 1929, Eau Claire.

vitality; and (3) a careful search for pyorrheal pockets. The radiogram may show the presence of apical abscesses, granulomas, early destruction of the peridental membrane, root fragments, incompletely filled root canals or destruction by the pyorrheal process. These radiograms should be read by the radiologist and dentist or by the physician and dentist. The final decision as to how much should be done should be made by the physician for he is viewing the patient as a whole and in terms of hazards of existing disease; and not in terms of dental restoration only. The testing for non-vital teeth and pyorrheal pockets may be done by both parties, but I think the dentist should be the judge.

I realize fully that the question of cooperation is a delicate one, for unfortunately we professional men are very narrow, sensitive and often too proud. However, if we will be honest with ourselves and try to look at the problem before us, we can classify responsibility justly. Once that is accomplished, harmony will be assured as long as we adhere unselfishly to principle.

The most important responsibility, when one is trying to discover foci of infection, is the disease which the patient has and which the physician is attempting to relieve. Naturally, the physician is the one to whom the patient looks for relief and if the physician uses his dental associates to help solve this problem, they should realize that what he is asking to be done is for the patient's good. For that reason, if he should ask to have all of the teeth removed, that is his responsibility and not the responsibility of the dentist. If he wants devitalized teeth removed, even though the x-ray is not positive, or if he wants teeth with poorly filled root canals removed, or teeth with extensive pyorrheal destruction or pockets removed, the dentist must place himself in the position of a technician, carrying out the wishes of his physician friend. This is no reflection upon the professional knowledge of the dentist any more than when my friends in general practice, who are doing internal medicine, ask to have the tonsils out or when a surgeon is told by the internist or by some other specialist that there are certain lesions present in the abdomen and is told to go ahead and remove them. Their feelings are not hurt, their pride is not embarrassed and they do not ask to re-examine the patient and then refuse to operate, saying that the patient might get along on medical treatment. The entire difficulty rests in the classification of responsibility. A dentist can maintain his professional dignity and still act as a technician in these cases by simply telling the patient that is what their doctor wishes and he will carry out the doctor's request. We fully realize that this is a hard task for the dentist when he has been working for years preserving teeth, building bridges and doing all manner of restoration to avoid artificial teeth; then suddenly the patient developes some systemic disease which the physician feels is due to focal infection and the physician requests the destruction of all of his constructive work. This may be a point of embarrassment if the physician does not pave the way by explaining to the patient that this same damage occurs to teeth that have never been worked on. The physician should do everything in his power to make it clear to the patient that this calamity is no reflection upon the dentist's work, but simply a misfortune. I think very often the physicians are too willing, or at least, too open in their criticisms to the patients on dental restorations. All of us see dental restorations which, at a given time, do not look the best in the world, but we do not know the conditions that existed when these restorations were made. Therefore, if the end result is not perfect, we should remember that we all live in glass houses.

In light of our present knowledge of the variety of pathogenic organisms recovered from devitalized teeth, the practice of removing the pulp and preparing the teeth in a so-called aseptic way for filling the root canals, and attempts to treat alveolar abscesses by root amputation or drainage, is usually a very doubtful practice. In these cases the dentists are usually jeopardizing the patients' health by actually creating foci of infection, rather than treating the patient as a whole, in an effort to save a single tooth. I feel that probably the dental

schools have been to blame for some of this laxity in the past by not teaching enough bacteriology and its relationship to infections in the mouth. Also, the underlying principles of asepsis have been neglected, for so often we see serious breaks in technique which contaminates some part of the field and thereby voiding all efforts at asepsis. Too often there is a lack of the so-called "surgical reflex" which will make or break aseptic technique, for the operator is engrossed in his operation and unconsciously contaminates his field. I think the dental schools at present are realizing this and improving their teaching considerably. However, I do not think that there is any limitation to the amount of stress that should be laid on this subject.

Physicians have their faults, too. They should study their patients carefully and evaluate the seriousness of the disease existing, as compared to the radical measures that they recommend. Also, they are too prone to recommend radical extractions, when a careful study of the x-rays and the teeth will reveal only a few offending teeth. It is very easy to say—"Have all of your teeth out". But it takes a little more time and thought to pick out the ones that need to come. Of course, if you say—"Have all of them out", you are bound to hit the right one, but that practice is neither fair to the patient nor to the dentist. Only too often physicians will condemn teeth with large inlays or crowns without using the x-ray or vital tests. These restorations, that they condemn, have cost the patient considerable time, money and suffering and then we, in a hurried moment to do something for the patient, say—"Well, that's due to a bad tooth. You had better have those crowns out". Or, "Those teeth with the large inlays look suspicious. You had better have them out". It is no wonder that the dentist often objects to the physician's recommendation as long as we practice such unscientific methods.

PROBLEMS OF RESTORATION

The question of dental restorations is a question that requires considerable thought and study by one who is trained in the mechanical processes involved and the underlying ground work for restorations often lies in caring for the gum and the underlying bone properly at the time of extraction. Extraction of teeth is the dentist's work and not the physician's and I think the physicians who attempt this practice should be condemned. We have our means of livelihood and the dentists have theirs and even though we feel capable of rendering that service to the patient, it is not a fair practice, and unless we have had full dental training, we do not see the problems of restoration. Therefore, we may make a very simple restoration difficult by not preparing the field at the time of extraction. We have no more right to extract teeth, unless some dentist refuses to do it, than the dentist has to radiograph the teeth and recommend extractions, because the patient, in the course of treatment, complains of some systemic ailment. I know this is practiced by some dentists without advising the patients to consult their physicians for the care of their systemic condition.

Thus, when we go over the problems involved, which make for a happy co-operation between the two branches, we find that there are faults on each side of the fence and that those faults exist largely by virtue of misunderstanding and improper classification of the responsibility involved. If we will just be broad and unselfish in our viewpoint, we can render real service to our patients and at the same time not offend our colleagues. As is often stated in the Bible—"One may do many good things, but without charity, he profiteth nothing".

I hope that my remarks will be accepted in the spirit in which I offer them. That is, an honest attempt has been made to outline what I consider the ideal way to handle the problem of dental focal infection.

GLAND CULTURES IN INFECTIOUS ARTHRITIS

Bacteria were obtained from seventy-two, or 60 per cent, of 120 glands of which cultures were taken by the method described by Mary A. Poston, Baltimore (Journal A. M. A., Aug. 31, 1929). Ninety-three per cent of the organisms grown belonged to the *streptococcus viridans* group.

The Injection Treatment of Varicose Veins

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Until recently, the treatment of varicose veins of the lower extremities has been notoriously unsatisfactory. Surgical removal necessitates hospital confinement, requires a more or less prolonged stay in bed, is not without its dangers, and in addition to all this, recurrences are far from being infrequent. Under these circumstances, many surgeons do not urge operation, and many patients, unless positively disabled, prefer to endure their discomforts and disabilities rather than submit to a procedure which holds out a rather indefinite promise of success. With the advent of the injection treatment, however, the situation has undergone a decided change for the better.

Although comparatively new in America, the method has been in use in Europe for a number of years. The French, German, Scandinavian, and, to a lesser extent, the English literature, is voluminous on the subject, and the procedure is everywhere generally accepted and practiced.

In the United States, widespread adoption of the treatment has been rather slow, owing principally, I believe, to the fear of embolism. *A priori*, this fear would seem to be well-founded; practically, the danger may be said to be non-existent, for reasons which will be considered later. From a statistical standpoint, there are available many figures demonstrating the innocuousness of the procedure; among the most recent are those of McPheeters and Rice (1). These investigators collected reports of 53,000 cases treated by the injection method, with a mortality traceable to the injection of 0.0024 percent. Linser, likewise, states that he has never observed embolism in over 15,000 injections. These figures are unquestioned; they prove that this method of treatment is one of the safest of surgical procedures.

Attempts to produce occlusion of veins by the injection into them of various substances have been made for many years; however, due principally to the fact that the solutions formerly used were highly caustic, leading to tissue necrosis and sloughing, the object aimed at could not with safety be attained.

The present method was originated by Linser, of Tübingen, in 1912, and was later popularized in France by Sicard. Since then, its use has become general throughout Europe.

Contrary to the belief formerly held, which belief was responsible for the ill-repute into which the treatment fell for a time, strong toxic and coagulant substances are not necessary for success; consequently, the use of carbolic acid, ferric chloride, tincture of iodine, etc., is no longer practiced nor justifiable. The principal substances in use today are sodium chloride, sodium salicylate, and various sugars. Mercuric chloride is advocated by some, but its use has been rather limited, due to its toxicity. Other drugs which have been suggested and utilized to some extent are sodium citrate, sodium bicarbonate, and quinine and urethane.

A 20 per cent solution of sodium chloride is the form in which this salt is most commonly employed. It is non-toxic in this concentration, produces a firm clot, and may be used with a very fine needle, which is an advantage. However, great care must be taken to see that none of it escapes into the surrounding tissues; also, the cramps immediately following the injection are frequently very painful and severe.

Sodium salicylate is injected in a 20 to 40 percent solution. It likewise is capable of causing considerable tissue damage in case of leakage or of injection outside the vein, and is also toxic to a not inconsiderable number of patients.

Various solutions of sugars are in use, particularly in Austria and Germany: for example, dextrose, 50 per cent, equal parts of dextrose and levulose, which constitutes the mixture known as calorose, and 75 per cent solution of invertose. The latter is the one which I prefer for general use. All of these solutions produce excellent thrombi, are much less toxic to the tissues in case of leakage, and the injection is practically pain-

less. However, not infrequently a patient will be encountered who does not react to these solutions, and other substances must then be used. Another minor disadvantage is that concentrated sugar solutions are thick, requiring the use of a larger needle; this can be largely obviated, however, by warming the solution.

It should be emphasized that one cannot confine his treatment to the use of a single solution. The preparations described above all have their advantages and disadvantages; individuals vary in their reactions. If the desired result is not attained by the use of one drug, we must be prepared to employ something else. But for general use, in my experience a 75 per cent solution of invertose has proved most satisfactory.

PATHOLOGICAL CHANGES

The changes in the vein, both gross and microscopic, brought about as a result of the injection, have been exhaustively studied by many investigators, and the findings are everywhere in agreement.

The immediate effect of the injected agent is to give rise to an irritation of the endothelium of the vein, with congestion and cellular proliferation. As a result of this aseptic irritation, or chemical inflammatory process, fibrin is deposited in comparatively large amounts, amounts sufficient to occlude the vein in the usual case, and to cause stoppage of the blood stream through it. This takes place within a short time after the injection has been given. Later changes in the weeks following consist in organization and sclerosis of the deposit. Occasionally, particularly in the larger veins, the occlusion may be incomplete, or it may happen that the fibrinous mass may sometimes become canalized, with reestablishment of the lumen of the vessel. The process is thus essentially an obliterating endangiitis.

From this brief description, it is readily apparent that the pathological condition produced differs in several important particulars from that present in the condition ordinarily known as phlebitis. In the first place, the reaction is sterile throughout; furthermore, it is rather sharply localized to a definite segment of the vein, the clot is extremely adherent to the vessel wall, no pain or general edema of the extremity is produced, and the final result is to leave the vein as an atrophied cord.

Phlebitis, on the other hand, is usually the result of an infectious process: Thus it may, and usually does, affect large portions of the vein; it also has a decided tendency to spread, frequently extending from the superficial network to the deep, giving rise to edema. The clot is loose, pain is a constant feature. The end-result is entirely different, the vein remaining hard and bulky, with no tendency to atrophy, and extremely susceptible to further attacks of infection.

Finally, and for us this is the most important distinction, phlebitis may give rise to embolism, while the artificially produced, chemical venitis has positively no tendency so to do. A study of excised segments of affected veins anatomically confirms this clinical fact. In phlebitis, the thrombus is found to be loose and jelly-like, insecurely anchored to the vessel wall; in venitis, on the other hand, it is hard and firm, and very difficult to separate. Microscopically, in the latter condition, the clot is found to be so intimately attached that it may almost be considered as a part of the vessel itself, which is far from being the case in phlebitis.

TECHNIQUE

For several months past, I have been giving these injections with highly gratifying results. The technique which I employ is as follows:

The usual tests are made to ascertain the competency of the deeper system of veins. With the patient in the standing posture, the leg is carefully examined, and a prominent vein is selected to be injected. The skin is washed with alcohol, and the actual site of injection is marked with mecurochrome. This is important, as the veins become less prominent as soon as the leg is elevated. The patient is then placed on a table, lying down, with the head somewhat elevated. In order to secure a concentrated action of the solution on the inner wall of the vein, it is necessary to occlude for a time the segment of the vessel into which the injection is made. For this purpose, I use an

instrument known as the variocclusor. This is an oblong metal ring, 3 inches in its long diameter by 1½ inches in its short. It is provided with a handle by means of which it may be pressed down upon the vein, a segment of which is thus effectually cut off, both proximally and distally. The same result may be obtained by having an assistant use the forefinger and thumb for compression. For making the injection, I use an ordinary 10 cc. Luer syringe with a 22 gauge needle; between the syringe and the needle is placed a two-way stop cock.

The syringe is filled with the solution to be injected, after which the stop-cock is set so that the passage is open from the needle to the exterior, that from the syringe to the needle being closed. With the variocclusor in place, the vein is punctured, and the blood contained in the isolated segment runs out through the stop-cock, causing the vein to collapse and creating the most favorable condition for the action of the solution on the vein wall. The valve of the stop-cock is then turned so as to open the passage to the syringe, and the injection is made. Occasionally the pressure in the vein is so low that the blood does not escape; under such circumstances, the valve is turned, a small amount of blood is aspirated into the syringe to be certain that the needle is in the vein, and the injection is then made. No solution should ever be injected until one is absolutely certain that the vein has been entered. Following the injection, the pressure with the variocclusor or with the finger and thumb, is maintained for five minutes. A small pad of sterile gauze, held in place by adhesive strips, is placed over the puncture wound, to remain for two or three hours until natural sealing takes place. The patient follows his usual daily routine thereafter, just as though no treatment had been given.

This briefly and in general, is the technique which I employ, and by which I have made several hundred injections. It is entirely an office procedure, and causes no disability whatever. Special attention should, however, be called to a few points.

I make it a rule to administer the treatment in the morning, or if this is not possible, early in the afternoon. I do this in order that several hours may elapse before the patient goes to bed. Centripetal current in these dilated veins in the erect posture is extremely sluggish, if not entirely absent, and during the interval of time just mentioned, the thrombus has an opportunity to become firmly attached before the horizontal position is assumed. Theoretically, the remote chances of embolism are increased by recumbency shortly after the injection; practically, such an accident probably would not take place, but there is no justification for taking the risk.

One must be absolutely certain that the needle is within the lumen of the vein before beginning the injection. As was stated previously, the action upon the tissues of some of the solutions used is disastrous, if any escapes outside the vessel. Particularly is this true of solutions of sodium chloride and of sodium salicylate. The former gives rise to a peculiar blanching of the tissues, and both quickly cause necrosis and sloughing of large areas. When using either of these, a large syringe full of normal salt solution should be kept at hand: in the event of an injection outside the vein, or of extensive leakage, the tissues should be immediately infiltrated freely and extensively with the physiological saline. While this will not entirely prevent the damage, it causes a marked amelioration. Sugar solutions do not appear to have this harmful effect upon the tissues; considerable reaction may be produced, but necrosis and sloughing rarely, if ever, occur.

TISSUE REACTION

Even though the technique of the injection has been perfect, and it is practically certain that no leakage has occurred, not infrequently certain patients are encountered in whom a decided tissue reaction will take place. This is manifested by a considerable area of redness and induration surrounding the site of the injection, sometimes to a distance of several centimeters. This reddened and indurated area is sore and somewhat painful upon palpation. Such a condition need occasion no alarm. The height of the reaction is usually passed

within forty-eight hours, although some induration and increased sensitiveness may remain for several days. Hot fomentations are all the treatment that is necessary, and give prompt relief. In patients presenting this marked reaction, it is my custom to lengthen the interval between the injections, in order that the effects of one may be over before the next is given.

In a few cases, I have noted a localized, transient edema below the site of injection, apparently in the area drained by the vein which has been occluded. This edema is definitely circumscribed and confined to a small area, is not painful and gives rise to no inconvenience whatever, and disappears spontaneously within twenty-four hours.

Some writers advise the use of an elastic compression bandage following the injection and during the course of the treatment. I fail to see any necessity for this, and have not used it. In my work, I cover the puncture wound with a small pad of gauze, firmly applied and held in place with adhesive strips. This remains in place until the following day, when it is removed by the patient himself.

A few words should be said in regard to pain. With proper technique, the procedure is practically painless. When using solutions of sodium chloride or sodium salicylate, during or immediately following the injection, painful muscular cramps are sometimes experienced; these also occasionally appear when sugar solutions are used, but much less frequently. Such cramps are evanescent, disappearing shortly after the injection has been completed. The tissue reaction above described and which comes on later, gives rise more to a soreness in the structures affected than to actual pain. Severe pain of any considerable duration, especially if in the area immediately surrounding the point of injection, means that the needle has not entered the vein or that leakage is taking place, and the injection should be discontinued immediately.

FREQUENCY OF INJECTIONS

In regard to the interval between injections, it is my practice in the average case to inject about twice a week, although the treatment may be given every second or third day. In my opinion, the severity of the reaction should determine the interval, and I prefer to wait until this reaction subsides before again injecting; thus the length of time intervening may be two days, or it may be a week. It should be emphasized that the treatment must be ambulatory, and there is nothing to be gained by subjecting the patient to unnecessary inconvenience.

Not infrequently patients will be encountered in whom the veins collapse to a marked degree upon the assumption of the reclining position, making the injection very difficult of accomplishment. This may occur even though a tourniquet be previously applied. Under such circumstances, the treatment may be administered with the patient standing, the technique being otherwise the same.

In my work, I inject the upper part of the dilated veins first; when this is done, it frequently happens that fewer injections lower down are necessary, due to the fact that a main trunk has been occluded, leading to a disappearance of many of the collaterals. In no case, however, should injections be given above the middle third of the thigh. As a rule, I make only one injection at a sitting, although in the case of a patient with varicose veins in both legs, there is no particular reason why each leg should not be injected at the same time, if desired. However, if the patient should be one of those individuals who react strongly to the injected solution, considerable discomfort would probably result. As stated above, the treatment is and must be ambulatory; consequently, any unnecessary pain and inconvenience is to be avoided. I do not consider two injections at one sitting into the same leg at all advisable; as a matter of fact, the only reason for two injections is to shorten the duration of the treatment, and in most of these cases, haste is in no wise necessary.

The number of injections necessary varies with each case, and with the number of dilated veins. In a few, one or two will be found to be sufficient; the average, I should say, is six to eight; and finally, some severe cases will require twelve to fifteen. One must be guided by the conditions present, and inject until all prominent veins are ob-

literated. It is advisable to keep the patient under occasional observation for six weeks or two months following the completion of the treatment; not infrequently a vein will become apparent which was not to be found earlier, and sometimes complete absorption of the thrombus will be found to have taken place, with consequent non-obliteration of the vein. Such cases require further injections.

Contraindications to the employment of the injection method are extremely few in number. The most important of these is a history of a recent phlebitis. To inject veins which have been the seat of a bacterial inflammation at any time during the preceding year is to my mind a hazardous procedure; preferably the interval should be considerably longer. It is true that some men with extensive experience feel that it is safe to administer treatment after all pain and evidence of inflammation have completely subsided; however, for my part, I prefer to refuse an occasional case rather than take an unnecessary risk.

CONTRAINDICATIONS

And while upon the subject of phlebitis, it must be considered from another important angle. There is no question but that the injected veins may occasionally become the seat of a metastatic infection from some focus elsewhere in the body; such an occurrence is undoubtedly very infrequent, but there is sufficient clinical evidence that it may take place. Such being the case, a careful history should be taken of every patient, followed by a thorough general examination; if grossly infected foci are found which are apparently having any decided effect upon the general health of the individual, these should be given attention before proceeding with the injections. This has been recently discussed by Kilbourne (2), and deserves emphasis.

Other conditions which have been advanced as contraindications are old age, nephritis, and extensive edema of the lower extremities indicating deep circulatory disturbances. All of these, to my mind, are entirely relative. Old age in itself, provided the patient is otherwise in good general condition, is no reason for withholding injections; if the general health is enfeebled from some such cause or other, however, caution should be exercised, as it is well known that such individuals are very liable to thrombophlebitis. Nephritis, unless advanced, I do not consider a contraindication. Edema of the lower extremities must be carefully investigated. The condition very frequently accompanies dilatation and varicosities of the superficial veins, and under such circumstances, a few injections will cause it rapidly to disappear; on the other hand, if it is due to serious disturbances of the circulation in the deeper system of veins, injections will only aggravate it, if indeed, more serious consequences do not follow.

Varicose ulcers are decidedly not a contraindication, but quite the contrary. Treatment by injection constitutes the most effective and successful means at our disposal today for the rapid and complete cure of these ulcers.

In the employment of this method, untoward results are possible as follows: (1). From toxic action of the injected fluid; (2). From local injury following the injection; (3). From inflammation of the vein following the injection; (4). From gangrene, and (5). From embolism.

The first four of these possibilities may be dismissed with a few words. With the solutions which are generally used today, toxic action is hardly to be thought of, except in the case of an occasional individual who is susceptible to salicylates; under such circumstances, some other preparation should be employed. With proper care in making the injection, there should be no local injury following it. In this connection, it should again be emphasized that extreme care must be exercised in getting into the vein, because these thin-walled, dilated vessels are more difficult to enter than normal ones. Gangrene is to be avoided by first making sure that the deeper system of veins is competent.

As to embolism, increasingly large numbers of statistics clearly demonstrate that its occurrence following proper injection treatment of varicose veins is much rarer than following operation for the same condition.

In these cases, the tendency toward embolism appears primarily to be very slight, and whatever danger exists may be reduced to a minimum and the operation rendered entirely safe by attention to a few basic principles.

SUMMARY

To begin with, the cases should be properly selected. Patients presenting themselves with veins as large as the thumb or larger are not suitable for this form of treatment, and should be rejected.

The treatment must be ambulatory. This means that the injections must be given eight or ten hours previous to the patient's usual time for retiring; following the injection, he should be instructed to proceed about his usual daily routine, just as though no treatment had been given.

Injections above the middle third of the thigh are to be avoided.

The first injections should be made as high up as possible in the vein.

Finally, a small amount of fluid should be used for the first injection, in order to ascertain the patient's reaction.

If these principles are observed, in all cases treated, no danger of embolism need be feared.

From a considerable study of the literature, and from my own experience, I am convinced that the injection treatment of varicose veins is the best and most successful treatment for this condition which we have at our disposal today. It has the additional advantage of being purely an office procedure and of causing no interruption to the patient's usual routine, consequently it deserves to be widely employed. In this short paper, I have not attempted to be exhaustive; I have merely tried to describe a technique for administering these injections which I have found to be simple and practical, and which with ordinary care and attention to detail, can be readily utilized by any physician interested in doing this work.

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THE JOURNAL CLINIC

Teratoid Tumor of the Testicle; Report of a Case*

By ERNST A. POHLE, M. D.,
Madison

Ewing (1) considers three principal types of teratoma of the testicle; first, adult embryoma or teratoma; second, embryoid teratoma or mixed tumor; third, embryonal malignant tumor, the seminome of the French authors. There are many varieties and combinations of these groups. While tumors of the first group rarely develop into malignancies, this occurs quite often in the second group and the last group represents a fast growing and metastasizing neoplasm. In this last group the first metastases usually occur in the retroperitoneal lymph glands, along the abdominal aorta and vena cava. The disease then spreads upward to the mediastinum and neck and finally to the inner organs. According to our present knowledge, the therapeutic method of choice in such cases is early radical removal of the diseased testicle and the adjacent parts of the spermatic cord. This should be followed by a thorough course of radiation therapy, either x-ray or radium or both to the scar and the gland bearing regions. Preoperative irradiation of the primary tumor in all operable cases is recommended in the absence of metastasis. (2).

Although we have known for over twenty years that this type of neoplasm is radiosensitive, the prognosis is not very good. From statistics, it appears that a high per-

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centage of patients die from the disease within three years after the diagnosis has been made. On the other hand, there are on record a number of brilliant results following operation and irradiation even in far advanced cases. How difficult it is to give a correct prognosis in patients with embryonal carcinoma of the testicle is illustrated in the following report of a case.

CASE REPORT

Male, aged twenty-seven. Mother died of carcinoma of the breast; father, one brother and one sister living and well. Patient had usual diseases of childhood; bronchopneumonia in 1917. In June, 1921, he noticed a slight enlargement of right testicle; no pain nor tenderness. This slowly increased in size until in October, it was about as large as a lemon. At that time a puncture was made for hydrocele. The growth became painful and increased considerably in size within a week. In January, 1922, the right testicle was removed; the pathological report was embryonal carcinoma (Fig. 1). On January 25, 1922, the patient received roentgen treatment as follows: 220 KV., 3 MA., 50 cm. focal skin distance, through 1.0 mm. Cu. plus 1.0 mm. Al. Port of entry, anterior abdominal wall from the median line outward, and from the navel downward over the groin; 630 ma-min. being administered. Erythema appeared ten days after treatment.

On March 23 the patient received further roentgen treatment over the scar in the scrotum as follows; 135 KV., 25 cm. focal skin distance, through 6 mm. Al. and leather, 90 ma-min.

During the first week of April, 1922, a small nodule about the size of a cherry developed in the scrotum. This was removed at once and a pathological examination made. The diagnosis was recurrence of the teratoid tumor.

A considerable amount of fibrosis developed over the treated area, followed later by telangiectasis. The skin now showed the typical picture of a late reaction after irradiation.

The patient resumed work in June, 1922, and felt well until March, 1924. At that time he noticed a sharp pain between the scapulae and a dry cough. A roentgen examination of the chest (Fig. 2) showed a tumor mass in the upper mediastinum, which was considered secondary to the growth in the testicle (Dr. E. P. McNamee). The patient was referred to the writer by Dr. R. Dexter for deep roentgen therapy on April 1, 1924. He was given the following treatment over the area of the tumor: 200 KV., 4 MA., through 1.0 mm. Cu. plus 1.0 Al., 50 cm. focal distance, 20 x 20 cm. port of entry, front chest, 246 ma-min. On April 2 the same dose was given over the back; on April

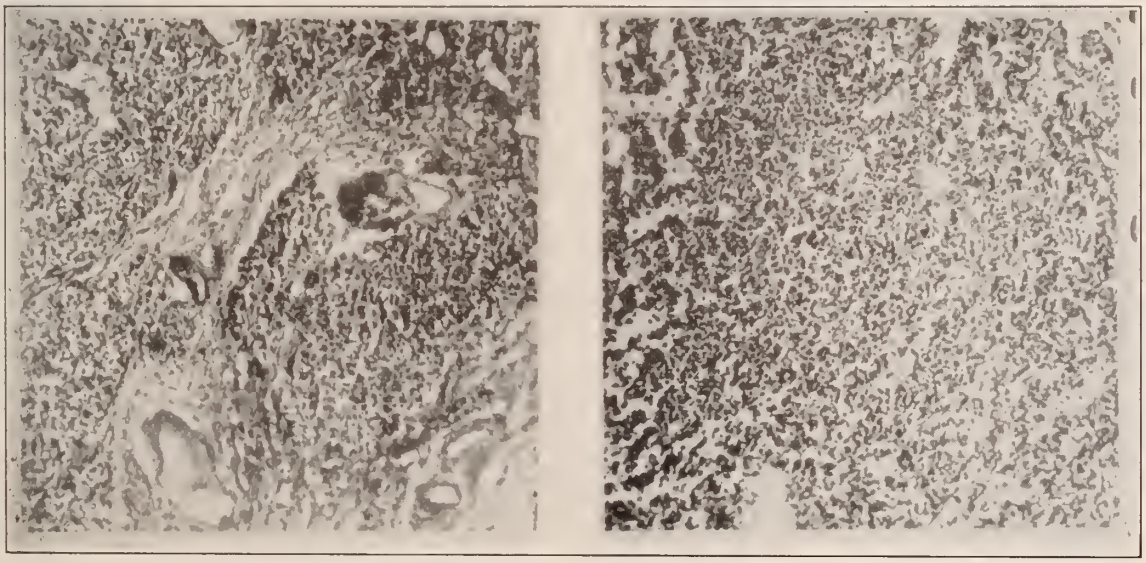

Fig. 1. Photomicrograph of the tumor.

Fig. 2. Röentgenogram of the chest, March 1924.

3, over the front, and on April 4, over the back. This dose corresponds to 100 percent of the erythema dose on the front and back fields; it should amount to approximately 500 to 600 R (primary energy).

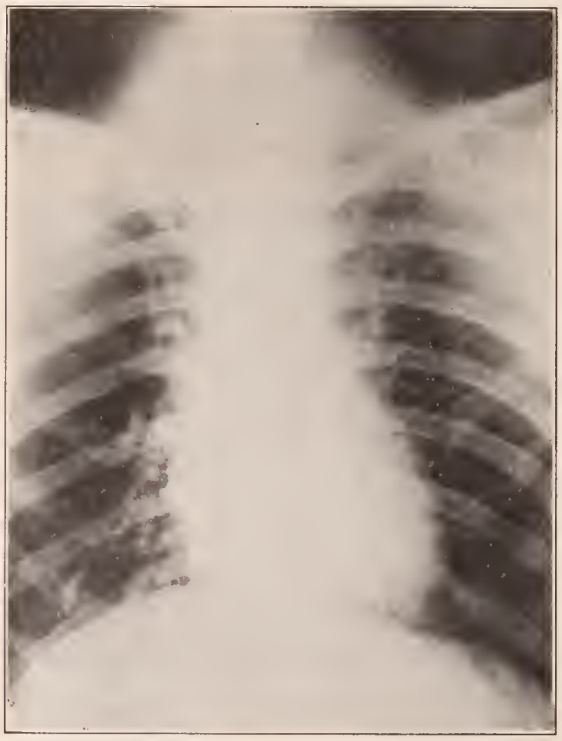

Fig. 3. Roentgenogram of the chest, February 1925.

The patient was slightly nauseated and felt rather weak for about twenty days. A mild erythema appeared about ten days after the treatments. His blood showed the usual reaction but recovered very well under arsen-iron medication. The next roentgen examination made on May 5, showed the tumor mass considerably decreased in size. The roentgen examination on June 5, showed the chest to be practically normal, and the examination on February 6, 1925 did not show any evidence of the tumor. (Fig. 3).

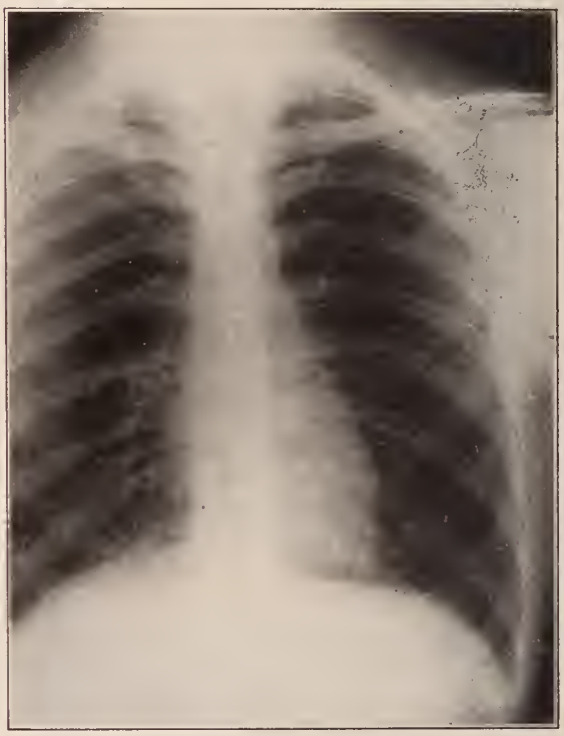

Fig. 4. Roentgenogram of the chest, May 1929.

In July, 1924, the patient resumed his occupation as intern in a hospital, and was in good health.

I had the opportunity to see and examine the patient at least once a year during the following years. He continued to enjoy good health and the last examination of the chest (Fig. 4) taken on May 4, 1929, reveals a normal chest.

Besides the fact that metastasis in this case occurred twice, three months and two years respectively following the operation,

the question of the x-ray dose over the mediastinum is rather interesting. As tumors of this type are usually radiosensitive, good results were produced with the old type of apparatus many years ago. (3) A number of radiologists prefer small doses, about 30% of the erythema dose (150-200 R-units) at a single sitting. As a matter of fact, high doses may be harmful because a severe systemic reaction might occur caused by the rapid breaking down of the tumor cells following irradiation. It is important to note that no symptoms pointing to such a reaction were observed in the case reported above, in spite of the higher dose administered. This is in accord with the experience at Memorial Hospital, New York. (2)

SUMMARY

The difficulty of prognosis in cases of malignant tumors is illustrated by the history of a patient with teratoid tumor (embryonal carcinoma) of the testicle, who developed a local metastasis three months following operation and a mediastinal metastasis two years following operation. The patient is free from any clinical symptoms of the disease five years after irradiation of the mediastinal growth.

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Multiple Perforations of Peptic Ulcers; Case Report

By G. E. SKEMP, M. D., and A. A. SKEMP, M. D.,
La Crosse

Since the classical description of Moynihan and others of ruptured peptic ulcer, the symptomology has been so frequently reviewed and re-emphasized that diagnoses of this dramatic condition are almost invariably promptly and correctly made, so there could be no excuse for reporting a case of peptic ulcer except that it be unique. Such was the case of patient Michael Heintz.

This patient is forty years of age and represents today a unique problem because, since 1924, he has weathered three perforations, a subphrenic abscess, an acute parenchymatous nephritis, an anterior and posterior gastroenterostomy, an enteroenterostomy and an acute gangrenous appendix which was a complication of his first perforation.

His first operation was Feb. 14, 1924. At that time a clear cut history and physical findings of acute perforation prompted the surgeon to open the abdomen two hours after the onset of the symptoms. His peptic ulcer history antidated this crisis by six weeks. The notes of the surgeon read as follows:

"Perforation of duodenum was just distal to the pylorus. The abdomen was full of fluid and pus. The ulcerated area was cauterized and brought together with catgut stitches. Gall bladder found to be greatly distended but emptied easily and had no gall stones. Appendix was found to be gangrenous. This was removed and stump invaginated. Stab wound was put in from the right side and tube drain was put into the pelvis."

Patient's convalescence in this was uneventful. I have reviewed the history, and although the findings seem quite positive, from the standpoint of the history, I am bewildered to know just how the appendix could have advanced to the gangrenous stage with such a brief antecedent history. There is an apparent inaccuracy here which I shall not attempt to explain.

On April 29, 1927, this patient re-entered, re-enacting with a perfect degree of accuracy the same experience described above. At 10 o'clock on this morning he had intense upper abdominal pain, and when seen a short time after, he lay motionless because even the slightest movement intensified his pain beyond endurance. There were again the classical findings and he was operated immediately. This time the operative notes read as follows:

"Incision made through old scar. When peritoneum was opened gas and water escaped from the abdominal cavity. There were dense adhesions from the old operation and old ulcer. The stomach was mobilized with difficulty and a large ulcer was found on the lesser curvature which lay inaccessibly high. The perforation was 1 cm. in diameter and the indurated area was 7 cm. in diameter.

The entire ulcer area was excised and the wound closed by interrupted sutures and was reinforced with omentum."

Because of oozing we could not control and the extent of contamination, we deemed it advisable to drain. This was a bit unorthodox and probably the complications which followed were, in a measure, due to the drainage. The patient left the hospital on the twenty-sixth of May. The wound healed by second intention and his convalescence had been without incident except on the tenth day following the operation he suffered from very intense epigastric pain which lasted for an hour. Two weeks later he was again seen. At this time he had a fever and a mass in the left hypochondrium. This was interpreted as being due to a subphrenic abscess and he was again readmitted to the hospital and the abscess opened under gas anesthesia. He improved very slowly after this. He was suffering from upper abdominal pain almost constantly. The abscess was draining rather profusely and on the twelfth of July he was readmitted to the hospital and it was found, at this time, that the food that he ate was coming through the upper abdominal incision, and pus was likewise draining freely. At this time he looked extremely ill. He was emaciated, edematous and pallid and his urine was practically solid with albumin.

In retrospect, it would seem that the tenth day after his operation he had another perforation which was, in a measure, the cause of the subphrenic abscess and the sepsis which followed but which was taken care of by the dense adhesions which had formed in this region. By August 11th the patient's nephritis had entirely subsided, the drainage had stopped from the abdominal wounds, the stomach was functioning well, and he was able to return to work. He expressed himself as feeling fine.

Fluoroscopic examination, at this time, showed a slight effusion in the left chest. This was aspirated and found to be serous in nature and gradually absorbed spontaneously.

So, within a period of three years, this patient had had three perforations with complications as enumerated. In April 1929 patient had a recurrence of the ulcer symptoms. At this time the stomach failed to empty and in the evening he would vomit the food he had taken in the morning. A motor meal disclosed an obstruction at the outlet of the stomach. Patient became very emaciated and weak and was unable to work. For a period of about two weeks belladonna, antacid and dietetic treatment were tried. This availed nothing so the patient was advised to submit to re-operation and it was planned to do a gastroenterostomy.

At this time the examination was practically negative except for the fluoroscopic examination, and there was a large ventral hernia present from the preceding operations. He was re-opened through the old scar and an occluded pylorus was found and the stomach was enmeshed in such a density of adhesions that it was extremely difficult to isolate sufficient tissue for the anastomosis. A posterior no-loop gastroenterostomy was done according to the Mayo technique and the hernia repaired.

The patient's immediate convalescence from this was very gratifying. He suffered but very little shock and in a week's time he expressed himself as feeling fine. He then began to have upper abdominal discomfort and the stomach was aspirated and found to contain about 500 cc of bile. Repeated lavage, colonic, subcutaneous and intravenous therapy were instituted. The stomach was put to rest in the hope that the vicious circle would break. This it failed to do and a week later it was obvious that the man required more radical surgery to save his life. So the abdomen was again re-opened and it was found that the adhesions had become a bit denser and the manipulation a little more difficult. The posterior gastroenterostomy was discovered functionless. The only apparent reason was that the opening was not large enough and enough scar tissue had clamped down on it to render it more or less worthless. We did not expose it to know whether or not there was a spur but there must have been something of this nature to permit the ingress of bile but to prevent the egress of the gastric contents.

His condition was so desperate that it seemed that the major procedure of tearing

down this anastomosis and resecting the ulcer area could not possibly be tolerated so a loop of the jejunum about one foot from the anastomotic area was brought up over the transverse colon and meso-colon and anastomosed to the anterior wall of the stomach. The jejunum between the ligament of Treitz and the old anastomosis was united to that portion of the jejunum which lay between the new anastomosis and the old. These openings were made large and ample. One hour and a half was consumed in this procedure. During the manipulation of freeing the adhesions, an ulcer, which was on the verge of perforation, broke under our observation. This was immediately repaired. The patient was given saline intravenously and put back to bed in fair condition.

His convalescence after this was very smooth. His temperature did not mount one degree and he left the hospital in two weeks. He had not vomited a single time and expressed himself as feeling extremely comfortable. He has been seen many times since then and in one week he has gained sixteen pounds and no untoward symptoms have developed.

In recapitulation, this patient has experienced, during the past five years, at least three perforations, and maybe four, an acute gangrenous appendix, an anterior and posterior gastroenterostomy, subphrenic abscess, acute parenchymatous nephritis and pleural effusion. Of course, one marvels at the man's tolerance and the goodness of Divine Providence, and speculates a bit as to the etiology of peptic ulcer.

He had x-rays of his teeth and recently had abscessed teeth extracted. He had a cloudy right antrum of Highmore and was urged to have this drained.

We hope that Dr. Rosenow is correct and that the cause of this man's tribulations has been removed with the pus pocket on the end of his tooth, and we hope for his sake and ours, that no more operations will be necessary on his distorted incarcerated stomach.

WAUKESHA–WEST ALLIS LEAD IN LOW INFANT MORTALITY RATES

Madison, Wis., Sept. 17.—Waukesha and West Allis enjoy the honor of attaining the lowest infant mortality rates among Wisconsin cities during 1928, according to the annual statistical report on infant mortality in 729 American cities above 10,000 population, compiled by the American Child Health association. In the summary, given out by the state board of health, each of these cities showed a rate of 36 (meaning deaths under one year per 1,000 live births).

The average urban rate for 21 Wisconsin cities was 64, while the average for the 729 cities was 68.3. Third place for low infant mortality was credited to Marinette, with a rate of 39. Sheboygan was fourth with a rate of 47.

The Wisconsin rates follow:

Appleton	55	Marinette	39
Ashland	86	Milwaukee	71
Beloit	54	Oshkosh	53
Eau Claire	64	Racine	53
Fond du Lac	63	Sheboygan	47
Green Bay	73	Stevens Point	79
Janesville	68	Superior	63
Kenosha	61	Waukesha	36
La Crosse	58	Wausau	52
Madison	53	West Allis	36
Manitowoc	68		

These rates are termed "crude rates," being based on the deaths and births reported as occurring in a given place even though the residence was elsewhere. The state board explained that some cities showing low infant death rates lack hospitals or institutional homes for babies and utilize institutions in neighboring cities. Frequently this accounts for relatively low death rates in some of the smaller cities and higher rates for cities possessing such institutions.

GOVERNOR MAKES REAPPOINTMENTS

Four members of the State Board of Medical Examiners and a member of the State Board of Health have all been reappointed by Gov. Walter Kohler. Dr. Gustave Windesheim, Kenosha, was reappointed to the State Board of Health for the term ending 1936.

On the State Board of Medical Examiners reappointments for the four-year term ending July 1st, 1933 are: Dr. E. C. Murphy, osteopath, Eau Claire; Dr. J. B. Brewer, eclectic, Jefferson; Dr. T. J. Sheehy, allopath, Tomah, and Dr. W. N. Linn, homeopath, Oshkosh.

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EDITORIALS

THE STATE MEETING

"A SPLENDID meeting"; "The best meeting we have ever had"; "The Memorial Union is certainly an ideal place for a meeting of this kind"; and many more comments of similar nature were heard on every hand during and following the recent meeting of the State Medical Society.

While my memory goes back but twenty years, I am willing to go the chorus one better with the statement that, "altogether, it was the best State Medical Meeting I have ever attended".

The Memorial Union as a meeting place is certainly an ideal place for an assembly of this nature. Far enough away from the noise of the downtown district, and yet sufficiently near to the hotel to make walking back and forth a real pleasure. The advantages of having all proceedings, scientific sessions, business meetings, banquet, alumni luncheons and commercial exhibits under the same roof added much to the pleasure and convenience to those in attendance. Even the commercial exhibitors had no kick to register—and that is going some.

The scientific sessions were arranged with excellent judgment. While there were some disappointments in the attendance of some of the sectional meetings, I believe on the whole the plan is worthy of repetition. The informality of the small sectional meeting invariably brings out a better discussion, and a good discussion is frequently more valuable than the paper itself.

The scientific exhibit was a distinct disappointment to me. What there was of it was interesting and instructive, but I fear that the Madison profession, including the Medical School, did not live up to its possibilities. The scientific exhibit could be made one of the most attractive and most valuable phases of the meeting. Admittedly, it takes some effort, but it is distinctly worthwhile.

Those in charge of the program and arrangements deserve much credit—and I for one who enjoyed and profited thereby, wish to say "thank you!" O. L.

PHILOSOPHY, SCIENCE AND MEDICINE

PHILOSOPHY and metaphysics have come to be almost synonymous. Science has come to designate the special sciences (Biology, Physics, etc.). The one is regarded as the antithesis of the other. In this sense medicine is regarded as belonging to the sciences, and medical practice as being scientific. The medical practitioner makes great pretense at being a scientist, but scorns being a philosopher. The one implies a clinical laboratory practice, which involves the application of the special sciences, (Physiology, Pathology, Anatomy, etc.), the other, the empiric use of means not tested by laboratory methods.

These ideas have been propagated by the medical schools, largely because the clinician

has striven for recognition in the field of the special sciences. Instead of being proud in his own field of work, he has more or less envied the laboratory workers in bacteriology, pathology, or physiology, and allowed them to impute to their work the higher type of endeavor. As a result the young medical graduate is largely a laboratorian. His view of clinical medicine is narrowed to the fields of the special sciences. We are, therefore, failing to develop philosophers in the field of medical sciences. All great clinicians have been medical philosophers; not just cold blooded scientists.

If philosophy is conceived to be an attempt to systematize or unite isolated bits of certain knowledge into a coherent view of the whole, then certainly the clinician must be a philosopher who, according to this conception, is a scientist. In my opinion every medical student should be given this conception of his profession. He should be so trained that he would never approach a patient as a pure scientist in the narrower sense, but as a man so well acquainted with methods of observing physical phenomena and so well versed in the special medical sciences that a philosophical consideration of his observations develops for him a clinical picture which is as true a representation of the patient's condition as is possible.

It is then apparent that clinical studies are not alone carried out by laboratory methods, nor by physical examinations, but require as well a serious consideration of what the patient can tell about himself. It is also apparent that the facts revealed by such a study do not alone afford a diagnosis. It is only after the gaps, which exist between the bits of knowledge thus acquired, are bridged by a philosophical consideration of them that a picture is completed, which is a clinical diagnosis.

We often hear discussions of the value of the laboratory in medical diagnosis. These discussions always attempt a comparison of the value of methods practiced in various special fields of medicine. The student with a broad conception of medicine knows that no such comparisons are relevant. The special fields of practice can not stand alone. The attempt in diagnosis is to develop a picture which is complete; not to bring out alone a nose or a chest and expect to recognize the individual. An attempt at a comparative evaluation of the different methods used in medical diagnosis indicates a lack of a philosophical understanding of the problem. The specialist, who undertakes to treat in his narrow field without first developing or having developed for him a completed clinical picture, falls as far short of the high attainment which is implied in his profession as does the man who relies upon one method of clinical study for a diagnosis.

The difference between a technician and a physician is revealed by his conception of philosophy and science as related to medical practice. *W. D. S.*

THE FOUNDATION FUND

BY TWO enactments of the Wisconsin legislature and action of the Council and House of Delegates of the State Medical Society of Wisconsin, the Foundation Fund of the Society has been brought into being for the advancement of medical science. The Council is now empowered to accept donations and bequests and it is understood that a substantial sum has already been nominated for this fund in the wills of but two members.

In the years to come the interest that may accrue from such gifts will be used by the State Medical Society to advance Wisconsin medicine in all of its aspects. Gifts may be made in the names of the donors or as memorials, with the interest to be used either for a specific purpose named by the donor or for such purposes as may seem fitting from year to year by the Council of the Society. Undoubtedly the near future will bring to this fund gifts and bequests, small and large, from many members who will wish, in such manner, to return for the direct advancement of Wisconsin medicine some token of what the profession has brought and meant to them.

We commend the establishment of this fund as a far sighted action on the part of the State Society and legislature. To the members we suggest that it affords an opportunity for a becoming, productive and enduring bestowment.

In Memory of Charles Stuart Sheldon, M. D., 1842—1929*

By ROCK SLEYSTER, Trustee.
American Medical Association, Wauwatosa

Charles Stuart Sheldon—For nearly a half century his name—his teaching—his leadership—have been so intimately associated with Wisconsin medicine and with this organization, that it is fitting indeed to pause in our deliberations to-day to pay tribute to his memory.

Doctor Sheldon was born at New York Mills, a suburb of Utica, on January 14, 1842, the son of Mr. and Mrs. Stephen Sheldon, both of old New England stock. He lived the life of a farmer boy until graduated from Brockport Institute in 1858. He then spent one year at Andover, graduating from Phillips Academy in 1859. He then attended Yale, where he took his A. B. in 1863 and his A. M. in 1866. He is credited with having founded the Yale Glee Club. He came to Madison with his parents in 1863 and was principal of the Madison first ward grammar school for one year. In January 1865 he entered the Buffalo Medical College, graduating in 1867, and from Columbia College of Physicians and Surgeons in 1868. Returning west, Dr. Sheldon chose Winona, Minnesota, as a place to begin practice, and after three years there he moved to Greenville, Michigan, where he remained thirteen years and received his first training as a county secretary. On March 8, 1885, he moved with his family to Madison, and practiced continuously here until his death April 20th of this year. He is survived by his widow, Mrs. Emma Hodge Sheldon; a daughter, Mrs. Charles A. Lyman of Madison, and three sons; Sidney, formerly Dean of a Chinese engineering school; Stuart, a surgeon of Portland; and Walter, who practices medicine in Madison and is a member of this society.

Doctor Sheldon, during his entire life time, was a tireless worker for his medical organizations. He was secretary of the old Central Wisconsin Society during its whole life time of some twenty-five or thirty years. He had been president and secretary of the Dane County Society. He served as President of the American Academy of Medicine. He was president of this organization in 1913–1914. He was best known, however, as the dynamic, tireless secretary of the State Medical Society of Wisconsin, and in this office guided its destinies for a quarter of a century; a record I believe unequalled in the history of this country. Next to his family this society was nearer to his heart than any other thing, and after his retirement from active duty he never lost interest. Mrs. Sheldon tells me that on his death bed, when partly delirious, he thought the Council was meeting in the next room, insisted he must go in to it, and when urged that he was too ill, kept calling me to carry on the work.

In less formal vein—"Charlie" Sheldon! "Charlie" Sheldon who loved his fellow man! "Charlie" Sheldon, whose quick and sympathetic understanding meant so much to us through all the years; whose buoyant optimism and faith carried us through the difficult days of our reorganization; whose genial fellowship, keen sense of humor and ready response endeared him to each and everyone of us and made of each annual meeting an occasion of delightful mingling never to be forgotten. "Charlie" Sheldon —leader of the "saw bones choir". "Charlie" Sheldon, busy here—busy there—tirelessly attentive to every detail; always accomplishing the impossible.

We have lost our "little leader", and I like to recall A. P. Wilder in editorial comment in the New Haven Courier on his death. "Surely the precious things of life come in small packages." The future historian of this organization will write the name of little Charlie Sheldon in large—large letters. Mr. President, may I ask that in respect to him the members stand for a moment with bowed heads and with a silent prayer that we may measure up to his ideals, that we may carry on his expectations,—as a society, as men, and as doctors. I ask, sir, that today's adjournment be in his honor and to his memory.

* Presented before 88th Anniversary Meeting, State Medical Society of Wisconsin, Madison, 1929.

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Ashland-Bayfield-Iron	R. O. Grigsby, Ashland	M. L. Young, Ashland.
Barron-Polk-Washburn-Sawyer-Burnett	J. A. Diamond, Frederic	S. R. Medley, Shell Lake.
Brown-Kewaunee	E. S. McNevins, Green Bay	M. H. Fuller, Green Bay.
Calumet	J. A. Schmidt, Brillion	C. F. Lawler, Hilbert.
Chippewa	C. B. Hatleberg, Chippewa Falls	W. C. Henske, Chippewa Falls.
Clark	M. McGonigal, Loyal	E. L. Bradbury, Neillsville.
Columbia	C. W. Henney, Portage	H. E. Gillette, Pardeeville.
Crawford	O. E. Satter, Prairie du Chien	C. A. Armstrong, Prairie du Chien.
Dane	H. H. Reese, Madison	C. K. Schubert, Madison.
Dodge	L. M. Bachhuber, Mayville	A. A. Hoyer, Beaver Dam.
Door	John Hirschboeck, Forestville	T. C. Proctor, Sturgeon Bay.
Douglas	E. A. Myers, Superior	J. W. McGill, Superior.
Eau Claire and Associated Counties	F. S. Cook, Eau Claire	E. E. Tupper, Eau Claire.
Fond du Lac	R. L. Prees, North Fond du Lac	H. R. Sharpe, Fond du Lac.
Grant	C. H. Andrew, Plattville	M. B. Glasier, Bloomington.
Green	Edward Blumer, Monticello	J. F. Mauermann, Monroe.
Green Lake-Waushara-Adams	C. U. Senn, Ripon	A. J. Wiesender, Berlin.
Iowa	A. D. Brown, Mineral Point	M. W. Trentzsch, Highland.
Jefferson	E. W. Bowen, Watertown	M. G. Peterson, Lake Mills.
Juneau	C. A. Vogel, Elroy	A. T. Gregory, Mauston.
Kenosha	H. A. Binnie, Kenosha	Margaret Pirsch, Kenosha.
La Crosse	N. P. Anderson, La Crosse	J. E. Heraty, La Crosse.
Lafayette	W. W. Peck, Darlington	S. A. J. Ennis, Shullsburg.
Langlade	P. J. Dailey, Elcho	J. C. Wright, Antigo.
Lincoln	E. K. Morris, Merrill	W. H. Bayer, Merrill.
Manitowoc	J. E. Meany, Manitowoc	A. P. Zlatnik, Two Rivers.
Marathon	W. A. Green, Wausau	Verne E. Eastman, Wausau.
Marinette-Florence	T. J. Redelings, Marinette	M. D. Bird, Marinette.
Milwaukee	H. J. Gramling, Milwaukee	E. L. Tharinger, Milwaukee.
Monroe	J. M. Scantleton, Sparta	H. H. Williams, Sparta.
Oconto	R. J. Goggins, Oconto Falls	G. W. Krahn, Oconto Falls.
Oneida-Forest-Vilas	C. D. Packard, Rhinelander	I. E. Schiek, Rhinelander.
Outagamie	G. J. Flanagan, Kaukauna	C. D. Neidhold, Appleton.
Pierce-St. Croix	A. E. Gendron, River Falls	J. W. Prentice, Amery.
Portage	C. von Neupert, Stevens Point	F. R. Krembs, Stevens Point.
Price-Taylor	F. W. Mitchell, Ogema	G. E. MacKinnon, Prentice.
Racine	John Docter, Racine	Susan Jones, Racine.
Richland	W. C. Edwards, Richland Center	G. Benson, Richland Center.
Rock	F. B. Farnsworth, Janesville	H. E. Kasten, Beloit.
Rusk	L. M. Lundmark, Ladysmith	
Sauk	E. McGrath, Baraboo	Roger Cahoon, Baraboo.
Shawano	R. C. Cantwell, Shawano	C. E. Stubenvoll, Shawano.
Sheboygan	C. J. Weber, Sheboygan	R. L. Zaegel, Sheboygan.
Trempealeau-Jackson-Buffalo	C. O. Rogne, Ettrick	R. L. MacCornack, Whitehall.
Vernon		Wm. H. Remer, Chaseburg.
Walworth	E. T. Ridgway, Elkhorn	S. G. Meany, East Troy.
Washington-Ozaukee	G. S. Cassels, Port Washington	P. M. Kauth, Slinger.
Waukesha	A. J. Loughnan, Oconomowoc	J. F. Wilkinson, Oconomowoc.
Waupaca	T. E. Loope, Iola	A. M. Christofferson, Waupaca.
Winnebago	D. J. Ryan, Neenah	W. N. Linn, Oshkosh.
Wood	D. Waters, Wisconsin Rapids	W. G. Sexton, Marshfield.

SOCIETY PROCEEDINGS

BARRON-P-W-S-B

Members of the Barron-Polk-Washburn-Sawyer-Burnett County Medical Society met on September 3rd at Barron. The meeting was held at the Majestic Theatre with about twenty-five physicians in attendance. The program consisted of the following: "Urinary Calculi" by Dr. W. G. Sexton, Marshfield; Discussion by Dr. H. M. Coleman; "Gas Gangrene" by Dr. A. S. White, Rice Lake; Discussion by Dr. R. G. Arveson, Frederic; General discussion on Pernicious Anemia. The meeting closed with a banquet at the Commercial hotel. S. R. M.

KENOSHA

Dr. W. F. Lorenz of Madison, in charge of the Psychiatric Institute, addressed members of the Kenosha County Medical Society at their regular monthly meeting Tuesday evening, September 3rd, at the Elks' Club. Dr. Lorenz spoke extensively on the details of the work being done by the institute.

A report was made by the committee representing the physicians of the city and county as inspectors of the new crippled children's school in Kenosha. A number of visiting physicians from Racine were in attendance. M. P.

PIERCE-ST. CROIX

The Pierce-St. Croix Counties Medical Society met at Hammond on Friday, August 23rd, to celebrate the 80th birthday of Dr. E. L. Boothby. Dr. Boothby is still "hale and hearty" and engaged in active practice. The members of the society toasted the doctor and presented him with a gift in token of their esteem and respect for this "grand old man."

Dr. Louis E. Dougherty of St. Paul presented a paper on "Surgical Treatment of Pulmonary Tuberculosis," and Dr. Harry Ritchie, also of St. Paul, spoke on "An Appreciation of the Progress of Surgery." J. W. P.

ROCK

The Beloit Country Club was given over on August 21st to the members of the Rock County and Winnebago (Ill.) County Medical Societies and their wives. The occasion was the annual mid-summer get-together promoted by the two societies, general arrangements being in charge of Dr. C. N. Dawson, of Beloit.

A golf tournament, bridge and dinner dance furnished diversion throughout the day. There were prizes for all events and perfect weather provided the incentive for a sporting game of golf. Dinner was served at the club house, covers being laid for a hundred and forty. Dancing followed the informal entertainment and speeches during the dinner hour.

WALWORTH

Dr. J. R. Learmonth of the Mayo Clinic, Rochester, Minn., addressed members of the Walworth County Medical Society at the monthly meeting of the society held on Tuesday, August 20th.

WASHINGTON-OZAUKEE

A joint meeting of the Washington-Ozaukee County Medical Society and the Dental Society was held on Thursday evening, August 22nd, at Hartford. The meeting was both of an educational and social nature. About thirty physicians and their wives attended the dinner preceding the program.

FOURTH DISTRICT

The meeting of the Fourth Councilor District was held at the Grantland Club rooms, Lancaster, on Tuesday, August 27th. The scientific program was as follows: "The Clinical Significance of Ureteral Obstructions" by Dr. George Ewell, Madison; "The Present Status of Chronic Infections of the Prostate Gland" by Dr. J. B. Wear, Madison; "The Necessity for a Full-Time Scientific Secretary for our State Medical Society,, by Dr. Karl W. Doege, Marshfield; "Meckel's Diverticulitis" by Dr. R. T. Cooksey, Madison; "Lay Organizations in Public Health" by George Crownhart, Madison, and "Methods of Blood Transfusions" by Dr. R. B. Stout, Madison. A six o'clock dinner was served in the club rooms by the ladies of the Evangelical church. M. B. G.

NEWS ITEMS AND PERSONALS

The mortality in the second quarter of 1929 was somewhat lower than the average in Wisconsin, according to the State Board of Health's summary issued on the 31st of August. With 7,790 deaths reported, the death rate was 10.7 per thousand people, which compares with 11.1 in the same period of 1926, 11.6 for 1926, 10.6 for 1927, and 11.7 for 1928.

The outstanding facts are the marked decline in total deaths which are 641 fewer than in last year's period, and the material decrease in deaths from tuberculosis, pneumonia and influenza. Infant mortality declined by 124, and there was a decrease of 139 in deaths of persons 65 years and older. The marked decline in total deaths was believed due almost entirely to the fewer number of deaths from influenza and pneumonia.

Important causes of death are listed as follows: Pulmonary tuberculosis, 396; other tuberculosis, 55; typhoid fever, 6; diphtheria, 19; scarlet fever, 21; measles, 43; whooping cough, 42; pneumonia, 522; diarrhea enteritis under 2 years, 89; simple meningitis, 14; influenza, 142; puerperal septicemia, 23; cancer, 752; violence, 687.

The Fellowship Address of the American College of Surgeons will be delivered by Dr. Glenn Frank, president of the University of Wisconsin. The organization will hold its nineteenth annual Clinical Congress in Chicago on October 14th to 18th. Headquarters will be at the Stevens Hotel.

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Dr. Minnie M. Hopkins, Oconto, a former member of the State Board of Medical Examiners, has been ill at her home for some time. As yet she has not been able to resume her practice.

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Dr. Frederic Warren Haigh, of Madison, at present surgeon on the S. S. Calliwaii, is to take up post graduate work at Rush in October, specializing in ear, nose and throat. Following the post graduate course he will probably locate in Wisconsin.

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Dr. Holland T. Ground, Virginia, Minn., son of Dr. W. E. Ground, Superior, left early in August for Burns, Oregon, where he will assume charge of a new hospital in that city. Dr. Ground has been associated with the McIntyre hospital at Virginia for the past fourteen years.

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The August number of Medical Life, professional periodical of national circulation, contained a translation from the Dutch by Adrian Scolten, university medical student, on the subject of Nicolaas Tulp, ancient Dutch Surgeon.

Coupling his interest in the life of the Dutch trailblazer with a proficient knowledge of Holland Dutch, Mr. Scolten has brought to the attention of the English-speaking medical world a record of early research which has been praised as valuable.

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Dr. Charles Reineck and Dr. J. L. Benton, Appleton, gave short talks recently at the weekly meeting of the Lions' Club at the Conway hotel, at Appleton. Dr. Reineck spoke on "State Penal Institutions" while Dr. Benton gave a short review on "Public Health."

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Dr. E. A. Fletcher and Dr. N. W. Bourne, of Milwaukee, have announced the removal of offices from 130 East Wisconsin Ave., to Rooms 1134–1141 in the Bankers Trust building at 84 East Wisconsin Ave., Milwaukee.

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A testimonial dinner was given on Friday evening, August 23rd, at the Land o' Lakes Hotel, Rice Lake, in compliment to Dr. O. M. Sattre for the outstanding service he has rendered to Lakeside hospital, of which he has been chief of staff since its inception.

Preceding the dinner a bronze tablet was unveiled in the vestibule of the hospital with this inscription: "In Appreciation of the Gifts and Service of Olaf M. Sattre, M. D." The tablet was given by the hospital, and the occasion of its unveiling was made a pleasant feature, with short talks by board members, after which the tablet was unveiled.

A fine tribute was paid to Dr. Sattre by Dr. D. L. Dawson, who praised him as an associate and friend, for his splendid cooperation and advice, and gave a brief history of their work and the efforts which led to the building of the hospital. Talks were given by Rev. W. F. Tomlinson, field secretary of the hospital; Judge Laurence S. Coe, an official and member of the hospital board since its organization; Rev. Fred J. Jordan, and T. S. Ketcham, president of the hospital board for many years. Places of honor were reserved for Dr. and Mrs. O. M. Sattre and daughter, Miss Ellen, and their son-in-law, Atty. Frank Kuehl of Madison.

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The unshadowed driving record of Dr. E. L. Bradbury of Neillsville has been darkened. After maintaining a perfect score for twenty-eight years, Dr. Bradbury met with a minor accident in August. On the anniversary date of his purchasing his first car he was crowded into a ditch by a passing tourist.

Dr. Bradbury was one of the first automobile owners of Clark county, buying a car in 1911. He has driven a series of cars over country roads in all kinds of weather during the last twenty-eight years and until now has had no mishaps.

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Gov. Walter J. Kohler announced recently the appointment of Dr. W. F. Lorenz, Madison, as delegate to the First International Congress on Mental Hygiene, in Washington, D. C., May 5th to 10th, 1930. Dr. Lorenz will represent the state of Wisconsin on the committee on organization.

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Physicians of the University of Wisconsin, whose duty it was to guard the health of 15,430 regular session and summer students during the year 1928–1929, paid 48,620 visits, either office or house calls.

An increase of 5,000 over the year before when 43,460 calls were paid, was not an indication of a less robust enrollment, but was caused by the epidemic of grippe during the winter. Only nine more students were admitted to the infirmary than the year before or exactly 2,006 patients.

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Dr. J. B. Thompson, formerly of Stevens Point, has taken over the practice of Dr. Olin Paul and the office in the First National Bank building, Kaukauna.

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Dr. R. J. Portman and Dr. E. A. McKenna have announced opening of offices in the Rundhammer building in Birnamwood. The physicians will continue to maintain offices at Antigo.

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Dr. J. F. Mauermann, of Monroe, has been appointed to succeed the late Dr. W. B. Monroe as health commissioner of that city.

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Dr. D. R. Campbell, Westfield, has suffered a general breakdown and will spend several months at the Soldiers' Hospital, Milwaukee, in an effort to regain his health. In his absence Dr. James W. MacGregor, of Portage, will have charge of his practice.

Dr. and Mrs. Adolph Gundersen and their son, Dr. Sven Gundersen, La Crosse, returned recently from abroad. They made the return ocean crossing on the Bergensfjord, after having spent almost three months traveling through Norway. Dr. Sven Gundersen will return soon to serve his interneship at the Massachusetts General Hospital, Boston.

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Dr. Herbert L. Wright, health commissioner of the city of Sheboygan, has tendered his resignation to take immediate effect. Dr. Wright stated that the ill health of Mrs. Wright and himself prompted him to resign and that a change of climate was contemplated.

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Dr. A. E. McMahon, formerly of Glenwood City, has taken over the practice of Dr. J. W. Prentice of Amery. Dr. Prentice left recently to open offices at Ashland.

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Dr. Lambert M. Lundmark and Dr. Woodruff Smith, of Ladysmith, have formed a partnership in the practice of medicine and surgery and will have offices in the Pederson building.

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Dr. Walter C. Nason, Ripon, announced recently that Dr. James B. Oliver has become associated with him in the practice of medicine and surgery. Dr. Oliver is the son of Dr. T. J. Oliver and grandson of Dr. B. C. Brett, both of Green Bay. He is a graduate of Northwestern and until recently was connected with the Los Angeles Lutheran hospital.

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Dr. C. F. Harris, former Bayfield pediatrician, will open offices in the Braum block, Ashland, in the near future. Dr. Harris is a graduate of Rush Medical College in 1914.

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Still a practicing physician after fifty-three years in the profession, Dr. Margaret Caldwell, Waukesha, observed her eighty-fourth birthday anniversary on the 10th of September by administering to patients in the morning and sleeping in the afternoon, her daily routine for the last eight years.

Dr. Caldwell, one of the oldest active physicians in the state, graduated from Northwestern University Women's Medical School in 1876 with a class of ten, the second or third class to complete the course.

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Dr. A. J. Pullen and daughter, Damarus, returned to Fond du Lac early in September following an extended trip in Europe, during which time Dr. Pullen entered the American hospital in Paris and St. Thomas hospital in London for the purpose of studying diseases of children. The doctor and his daughter traveled down the Asiatic coast visiting points of historic interest.

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Dr. F. E. Brinckerhoff, has returned to Beloit after an absence of two years. He recently completed post graduate work in surgery at the University of Pennsylvania Medical College.

Dr. Gerald K. Wooll, member of the Pember–Nuzum Clinic at Janesville, sailed for Copenhagen on August 31st. Dr. Wooll will be abroad until the first of the year visiting clinics in Europe. While abroad he will take post graduate work at Vienna in the subject of his specialty, urology.

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Dr. C. D. Partridge, Cudahy, was appointed school physician at a recent meeting of the school board of that city.

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Dr. Walter J. Meek, professor of physiology at the University of Wisconsin, was chosen president of the American Physiological society at a recent meeting of that organization in Boston. Another University of Wisconsin professor, Dr. H. C. Bradley, was also honored at the meeting. He was elected vice president of the American Bio-Chemical society.

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At a weekly meeting of the Shawano Rotary Club, Dr. John B. Gordon addressed the members on his trip through the south last winter.

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Several Milwaukee physicians spoke at the Mississippi Valley Conference on tuberculosis held at Grand Rapids, Mich., September 18th to 20th. Dr. A. A. Pleyte, clinician, led the discussion on "The Childhood Type of Tuberculosis" and Dr. G. L. Bellis, superintendent and medical director of Muirdale Sanatorium at Wauwatosa, spoke on "Food From an Administrative Standpoint." Dr. J. W. Coon, superintendent of River Pines Sanatorium at Stevens Point, is president of the conference and addressed the meeting at the annual dinner on September 19th.

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The partnership of Drs. Irwin and Irwin of Lodi was dissolved in September. Dr. Robert Irwin left recently for Milwaukee where he will specialize in urology. He has been associated with his father for the past year and a half.

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While scientific knowledge of medicine and surgery in Germany is in advance of that in the United States, this country is far superior to any European country in technique and hospital management, says Dr. E. W. Timm, Milwaukee, who has returned from a four months' tour of Europe. While abroad Dr. Timm visited clinics in several European cities to make a special study of surgical progress.

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Dr. W. J. Focke has opened a new hospital at Poynette. Besides private rooms and wards, it has operating and delivery rooms and also an emergency and fracture room.

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The next meeting of the Clinical Orthopedic Society will be held in Milwaukee on October 25th, 1929, and in Madison on October 26th, 1929. A cordial invitation is extended to all physicians who may be interested.

Dr. Paul C. Gatterdam has been appointed clinic physician at La Crosse to supersede Dr. G. R. Reay, resigned.

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Each Wisconsin school will soon be equipped with a first aid medical kit, under laws enacted by the legislature of 1929. The state superintendent of public instruction has sent a letter to all schools with recommendations for standard equipment in the kit. The one-room schools are expected to buy small kits for about $4.00 while larger schools of the consolidated type and high schools may pay up to $15.00 for their emergency kits.

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A country doctor who has practiced his calling since 1879 recently celebrated his golden wedding anniversary which was attended by all Walworth county. On September 17th, Dr. George Young of Elkhorn, was host to hundreds of people from all over the county. Telegrams, flowers, golden gifts and personal visits combined to make the anniversary one of note for the doctor who is son of a physician and the head of a medical family. It is estimated that the medical history of the Young family dates back for one hundred and three years.

MARRIAGES

Dr. R. W. Adams, Chetek, to Miss Thelma Constance Erickson, Santa Cruz, Calif., at Reno, Nevada, on August 24th.

BIRTHS

Dr. and Mrs. J. Newton Sisk, Madison, have announced the birth of a daughter on August 21st.

DEATHS

Dr. Benjamin B. Rowley, Milwaukee, died Thursday, August 22nd, at Columbia hospital following a year's illness. He had been suffering from complications growing out of severe shrapnel wounds received in France during the world war. Born in Vermillion, S. D., in 1889, Dr. Rowley was an honor graduate of Rush Medical College, Chicago, in 1912. He served as a lieutenant, captain and major in France with the Third Wisconsin national guard medical corps, and was chief neurologist at a large base hospital devoted to the treatment of shell shocked soldiers.

Returning to Milwaukee after the war, Dr. Rowley resumed his practice in the Colby–Abbot Building, where he was associated with Dr. G. V. I. Brown and Dr. Edwin Henes, Jr. He was a member of numerous medical societies, among which were the Milwaukee County Medical Society, the State Medical Society of Wisconsin, the American Medical Association, the Milwaukee Academy of Medicine, the Wisconsin State Neuro-Psychiatric Society, the Milwaukee Surgical Society and the American Central Neurological Association. He was a past president of the Wisconsin State Neuro-Psychiatric Society and an honorary member of the Chicago Neuro-Psychiatric Institute.

Colleagues in the medical profession were active and honorary pallbearers. They included: Dr. Edwin Henes, Jr., Dr. Eugene A. Smith, Dr. Andrew Rosenberger, Dr. William Grove, Dr. Oswald Lillie, and Dr. J. F. McNary, active bearers, and Dr. Walter Dandy of Johns Hopkins University, Baltimore; Dr. Peter Bassoe, Chicago; Dr. G. V. I. Brown; Dr. Richard Dewey, La Canada, Calif.; Dr. Arthur W. Rogers, Oconomowoc; Dr. Alfred W. Gray; Dr. Frank C. Studley, Dr. Gilbert E. Seaman; Dr. Curtis A. Evans; Dr. J. Gurney Taylor, Dr. Otto Foerster and Dr. John S. Gordon. Surviving are his wife and two children.

Dr. Ernst Copeland, Milwaukee, died on Tuesday, September 10th, at Columbia Hospital following an illness of about six weeks. Dr. Copeland was born at Stoney Creek, Mich., in 1853 and graduated from the Medical College of Indiana, Indianapolis, in 1879. In the early years of his practice in Milwaukee, Dr. Copeland was associated with the late Dr. F. E. Walbridge and during the last twenty years with Dr. Wilbur L. Le Cron in the Goldsmith Building.

The deceased bequeathed his interest in the Chandler building to the Milwaukee Academy of Medicine and $100 to the Milwaukee Surgical Society for a memorial dinner. Dr. Copeland was a highly competent art critic, and had visited many of the leading art centers in the world. He was one of the founders of the Milwaukee Art Institute, was a trustee of the Layton Art gallery and president of the board of trustees of the Layton School of Art.

Dr. Copeland was a member of the American College of Surgeons, the Milwaukee County Medical Society, the State Medical Society of Wisconsin, the American Medical Association, the Milwaukee Surgical Society and the Milwaukee Academy of Medicine. Members of the staff of Columbia Hospital and Nurses Training Schools, both institutions founded through Dr. Copeland's efforts and financial aid, attended the simple rites at Forest Home chapel.

Dr. Henry J. Suttle, Viroqua, died on Thursday afternoon, August 29th after a few days' illness. Dr. Suttle was born at Hazel Green, Grant County, in 1852 and graduated from the General Medical College, Chicago, in 1883. He practiced at Viroqua for forty-six years and for a long period was associated with Dr. William Trowbridge.

Dr. Suttle was a member of the Vernon County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. At the time of his death he was acting president of his county society. He is survived by a son and a daughter.

Dr. William G. Weideman, Milwaukee, died Wednesday, September 12th at Rochester, Minn., after an illness of six months. He had been confined

at the Kahler Hospital at Rochester for some time prior to his death. Dr. Weideman was born at Bay City, Mich., in 1874 and graduated from the University of Michigan Homeopathic School in 1904. In 1906 he completed a course of study at the University of Illinois College of Medicine and immediately thereafter established his practice in Milwaukee. In 1911 Dr. Weideman studied surgery at Vienna and for six years was on the teaching staff of Marquette University Medical School.

The deceased was a member of the Milwaukee County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. Surviving are his wife and a son.

Dr. A. L. Christofferson, Kenosha, died on Tuesday noon, September 3rd, following a heart attack. Dr. Christofferson was born at Waupaca on August 5, 1867 and graduated from Marion–Sims College of Medicine, St. Louis, in 1898. He practiced a number of years at Oshkosh, coming to Kenosha in 1918 where he has since made him home.

Dr. Christofferson was a member of the Kenosha County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. He is survived by his wife and three brothers who are also physicians. They are: Dr. P. J. Christofferson and Dr. A. M. Christofferson, Waupaca, and Dr. H. H. Christofferson, at Colby.

Dr. William B. Monroe, Monroe, died Monday, August 26th, at his office following a heart attack. Dr. Monroe was born in Fayette, Wis., on October 5, 1861. Following his graduation from Monroe high school he enrolled at the University of Wisconsin, receiving his A. B. degree in 1884. Immediately after his graduation from the university he entered the Bellevue Hospital Medical College, New York City, where he completed his course in 1887. For eight years he practiced in Brooklyn, northeastern Green county, and in 1895 became associated with his father at Monroe.

Dr. Monroe was a member of the Green County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. His wife survives him.

Dr. Arno W. Kratzsch, Milwaukee, died Thursday, August 22nd, at his home. Dr. Kratzsch was born at Newburg, Wis., in 1859 and graduated from Rush Medical College, Chicago, in 1884. The doctor practiced at Plymouth and Cascade before coming to Milwaukee in 1898.

The deceased was a member of the Milwaukee County Medical Society, the State Medical Society of Wisconsin, the American Medical Association and the Wisconsin College of Physicians. Surviving are his wife and two daughters.

Dr. Lorenz P. Bollard, Milwaukee, died Wednesday afternoon, August 21st, at the Emergency Hospital. Dr. Bollard died of injuries received in an automobile accident the week previous and did not regain consciousness. Born at Brockville, Ont., in the year 1858, Dr. Bollard came to the United States fifty years ago and graduated from the Bennett Medical College in 1885. He has resided in Milwaukee since 1897 and is survived by his wife and three daughters.

SOCIETY RECORDS

NEW MEMBERS

Vajda, A. B., 1415 Vliet St., Milwaukee.

Oberbreckling, P. E., 1517 Green Bay Ave., Milwaukee.

Canavan, J. P., Neenah.

Maas, David A., Danbury.

Aston, E. G., Port Washington.

CHANGES IN ADDRESS

Guittard, V. D., Keshena, to Mt. Pleasant, Mich.

Hough, A. G., Madison, to 204 Wisconsin Ave., Milwaukee.

Barr, Arnold H., Oconto, to Saugatuck, Mich.

Notbohm W. R., Dousman, to Sullivan.

Harris, C. F., Bayfield, to Ashland.

VanderKamp, Harry, Madison to Kalamazoo, Mich.

CORRESPONDENCE

AN APPRECIATION

Wisconsin State Board of Medical Examiners

Whereas, Our State Board of Medical Examiners was desirous of securing an appropriation of Ten Thousand Dollars from the State's General Fund for the enforcement of Chapter 147, Article 13, Paragraph 6, and,

Whereas, The Legislative Committee of the State Medical Society and their Executive Secretary J. George Crownhart were largely responsible for the introduction of Assembly Bill 247 providing for the appropriation into the Legislature, and,

Whereas, Said Bill 247A was through their efforts carried successfully through the Legislative and Executive Branches of the state, until its enactment into law on July 1st.

Therefore, The State Board of Medical Examiners wishes to express its appreciation for their splendid services and would ask that a copy of these resolutions be given to the Wisconsin Medical Journal and likewise a copy ordered spread upon the minutes of our meeting.

Done at Madison, Wisconsin in Executive Session, Sept. 11, 1929.

J. GURNEY TAYLOR, M. D.,
ROYAL C. RODECKER, M. D.
WILBUR N. LINN, M. D.,
Legislative Committee of the State Board of Medical Examiners.

CORDIAL INVITATION

Inter-State Post Graduate Medical Association of North America
445 Milwaukee Street
Milwaukee, Wisconsin

September 9, 1929.

Mr. J. G. Crownhart, Executive Secretary,
119 East Washington Avenue,
Madison, Wisconsin.

Dear Mr. Crownhart:

On the occasion of the annual meeting of the State Medical Society of Wisconsin, in session at Madison, Wisconsin, September 10 to 13, we extend greetings to your officers, members and guests, and a cordial invitation to attend the International Assembly of our Association, to be held in the city of Detroit, Michigan, October 21 to 25.

Very truly,

Inter-State Post Graduate Medical Association of North America,

Edwin Henes, Jr., M. D.,
Executive Secretary.

EH/h

$2,000 FOR PRESCHOOL EXAMS

State Board of Health
Madison, Wisconsin

Sept. 11, 1929.

Mr. George Crownhart,
Secretary, State Medical Society,
Washington Building,
Madison, Wisconsin.

My dear Mr. Crownhart:

This week I received the most interesting letter from the Outagamie county nurse, Miss Marie Klein.

The contents of the letter is such that I think you would be glad to get the information for the Wisconsin Medical Journal.

The county nurse discussed with the members of the county medical society the possibility of securing a physical examination for all school children including any preschool children that might be brought to the school at the time of the examination.

The county medical society discussed it and following the discussion the county medical society sent a representative committee to the county board for the purpose of presenting this whole matter to them for consideration. The county nurse discussed this question with members of the county board in addition to the presentation made by the Committee of the county medical society, with the result that the county board of supervisors appropriated a sum of $2,000.00 for this purpose.

The medical society stated that they would hold these examinations at the school house and would do the entire group for the sum appropriated.

I understand that the plan is to organize the work in such a way that the examinations will be completed in approximately six weeks.

Perhaps you have this bit of news, if so, disregard this letter.

With kindest regards, I am

Sincerely yours,

Cornelia Van Kooy, R. N.,
Director, Bureau of Public Health Nursing.

CVK/V

LIKES NEWS SERVICE

The Penn Mutual Life Insurance Company
Organized 1847
Philadelphia

September 9, 1929.

Secretary of Committee on Health,
State Medical Society of Wisconsin,
115 West Main St.,
Madison, Wis.

Dear Sir:

For some time you have been sending to me your "News Letter".

I have been very glad to have these and wish to thank you for your courtesy. I trust that you will find it convenient to continue sending them.

Very truly yours,

J. C. Humphreys, M. D.,
Director of Health Bureau.

JCH:L

ARMY MEDICAL LIBRARY

120 East Wisconsin Avenue,
Milwaukee, Sept. 13, 1929.

Editor, Wisconsin Medical Journal.

Dear Sir:

The attached regulations concerning the Army Medical Library seems to me to be of general interest to those interested in medical literature and might well be published in the Journal for the information of those concerned.

Very truly yours,

Gilbert E. Seaman.

Army Regulations No. 40-405 — War Department, Washington, June 29, 1929.

MEDICAL DEPARTMENT

THE ARMY MEDICAL LIBRARY

Section I

AUTHORIZATION AND OBJECT

1. Authorization.—The Army Medical Library is commonly known as the Library of the Surgeon General's Office, and is located in Washington, D. C. It will be administered in conformity with these regulations and with instructions from the Surgeon General. It has been characterized as "the great, central medi-

cal library of reference of the Nation." (6 Comp. Dec. 740.) Under the provisions of the act of March 3, 1901 (31 Stat. 1039), and the joint resolution of April 12, 1892 (27 Stat. 395), facilities for study and research therein are "afforded to scientific investigators and to duly qualified individuals, students, and graduates of institutions of learning in the several States and Territories, as well as in the District of Columbia," and its material, under suitable rules and regulations, is available for loan to such persons, and to schools, societies, and public libraries in every State of the Union. It consists now of over $62,000 books and pamphlets, all of which are catalogued and arranged for ready use.

2. Object.—The object of this institution is to select, purchase, catalogue, index, and preserve all obtainable medical literature and to make such literature available for the use of members of the civil medical and allied professions, and for officers of the Army, Navy, Public Health Service, Veterans' Bureau, and other governmental agencies, through the medium of the Index Catalogue of the Library.

Section II
INDEX CATALOGUE

3. General.—The Index Catalogue of the Library, begun in 1880 and continued to date, is a continuous bibliography of the medical literature of the world, arranged by authors and subjects in dictionary order in a single alphabet, comprising in May, 1929, 417,014 author titles, 346,634 book titles, 1,568,020 subject titles, and 8,685 pictures. The first and second series comprise the titles of medical literature from the earliest times to 1916; the third series includes the literature of more recent date. In this catalogue, with due regard to the elaborate system of cross references, a reader may obtain literature on any subject related to medicine by turning to its proper title in the alphabetical sequence.

Section III
CURRENT INDEX

4. General.—The quarterly Cumulative Index Medicus is a bibliography of current literature of medicine and allied sciences, published by the American Medical Association. It supplants the Index Medicus, which from 1879 to 1926 supplemented the Index Catalogue by current publication of index titles which might be years in reaching publication in the catalogue. Much of the material published in the quarterly Cumulative Index Medicus is furnished by the library. The quarterly publications are cumulated in a single annual volume.

Section IV
ORGANIZATION, PERSONNEL, AND ADMINISTRATION

5. Organization.—This library will be under the direct supervision and control of the Surgeon General. It will be directed and administered by the librarian. Broadly, its activities are subdivided into sections as follows:

a. Correspondence, accounts, and loans.
b. Selection, purchase, and cataloguing of books and pamphlets.
c. Selection and indexing of medical periodicals and serials.
d. Classification of medical literature by subject titles.
e. Preparation of material for printing of the Index Catalogue of the Library.
f. Public documents.
g. Vital statistics.
h. Preparation of books, pamphlets, and periodicals for binding.
i. Library hall (bound volumes).
j. Reading room (public documents and current periodicals).

6. Personnel.—The personnel of the library will consist, whenever practicable, of two or more officers of the Medical Department of the Army detailed thereto, viz., the librarian and an assistant to the librarian, and such civilian employees as may, from time to time, be authorized.

7. Administration.—*a. Duties of librarian.*—The librarian will be responsible for the administration and maintenance of the library, for the expenditure of the library appropriation, for the performance of the library work, and for the preparation and publication of the Index Catalogue of the Library. He will prepare and submit annually to the Surgeon General an estimate of the funds needed for the ensuing year. He will supervise the selection and purchase of medical literature. He will have sole authority for the loan of books and the disposal of duplicate literature. The civilian employees will be assigned to their duties by the librarian. He will render an annual report to the Surgeon General on the activities and progress of the library.

b. Duties of assistant librarian.—The assistant to the librarian will supervise that part of the library work which relates to the indexing and subject classification of medical literature, the preparation of copy for the Index Catalogue of the Library, and the printing and proof reading of the same. He will act as librarian in the absence of the latter.

c. Use of literature.

(1) Literature necessary for reference, unbound periodicals, medical incunabula, and rare or expensively illustrated books will not be lent outside the building, but must be consulted in the library.
(2) Medical literature may be consulted by visiting readers during Government hours.
(3) Loans of books to civilian physicians will be accomplished as inter-library loans, made through other libraries or reputable medical institutions, the expense of transportation to and from the library being borne by the borrower.
(4) Books that can be readily replaced will be lent to officers of the Army, Navy, Public Health Service, and other governmental agencies, who will be held responsible for the safe return of the volumes within two weeks from the date of their receipt. In special cases, this time may be extended upon direct application to the librarian, setting forth the reasons therefor.
(5) Books lost by loan will be replaced at the expense of the borrower.
(6) Further loans will be denied to anyone who has abused a borrowing privilege.
(7) Bibliographical references and medical information will be furnished to officers and civilian physicians when not of such extent as to interfere with routine official or military business.
(8) Research work of an extensive character can be arranged for and is commonly done at reasonable rates, as nonofficial work, by persons not in the employ of the Government. The addresses of such persons will be furnished on application to the librarian.
(9) The librarian will be addressed at the Army Medical Library, Seventh and B Streets SW., Washington, D. C.

By order of the Secretary of War:

C. P. Summerall,
General, Chief of Staff.

Aspirin can be sold only by stores employing registered pharmacists, in the opinion of a statement returned Saturday to the State Board of Pharmacy from the office of the attorney general. It is said by members of the board that the new Wisconsin statute is devised to prevent the sale of inferior aspirin in pool halls and grocery stores where there is no registered pharmacist. In 1917 Bayer aspirin patents ran out and since that time there has been a flood of artificial aspirin appearing in many different kinds of stores, it is explained.

* * *

A new law requires every Wisconsin school house to be provided with a first aid medical kit. The law applies to every public, private and parochial school.

State Superintendent John Callahan has sent a letter to all county and city superintendents, principals of county training schools and presidents of state teachers' colleges, outlining the requirements and suggesting the principal items that should make up a standard first aid kit as recommended by the state board of health.

Supply houses have assembled first aid outfits similar to the printed list submitted by Supt. Callahan, which range in price from less than $4 for small kits to $15 for large kits.

* * *

Governor Walter J. Kohler has signed the bill for a new children's hospital at Madison, carrying an appropriation of $300,000. It will take nearly a year to secure the plans.

The bill provides that $150,000 be used this year and the same amount the following year. The money will be taken out of the state insurance fund.

The state for years has been promoting the rehabilitation of crippled children with quarters provided in the Wisconsin general hospital. Due to the lack of room, an old building on the university grounds also has been used.

* * *

Game law pamphlets are now ready for distribution by the state conservation commission and through the various county clerks of the state. Due to late changes in the game laws by the legislature, the pamphlets could not be prepared before. Several changes are listed, among them that the season on all upland game birds, including prairie chicken, partridge, grouse, Hungarian partridge, pheasants, and quail or bob white, is closed in all counties.

Another change limits the season on rabbits from November 1 to January 1 except in Crawford county, where there is no closed season. No hunting on Wednesdays is the only change in laws regulating wild ducks and mud hens. The season extends from September 16 to December 20 excepting Wednesdays of each week, and the limit is 15 each day.

The black bear has been added to the list of animals upon which there is a perpetual closed season together with moose and elk. Most of the other hunting laws are unchanged.

* * *

The interim committee appointed by the legislature and the governor to study a retirement plan or pension system for state employes has organized with Senator P. J. Smith as chairman and E. E. Witte, secretary.

It was agreed that the secretary should gather data from the civil service commission as to the number of employes affected, the age and length of employment and also information from other states where a pension system is in effect. When such information is at hand the chairman will call the committee together and actuarial assistance will be asked from the insurance commissioner in accordance with the act.

The committee is composed of Senator P. J. Smith, Assemblymen Wallace Ingalls and E. M. Rowlands and two state employes appointed by the governor, E. E. Witte, director of the legislative reference library, and R. N. Qualley, of the department of public property.

* * *

The legislature has voted a $600,000 state office building for Madison, the new structure to be erected on the shore of Lake Monona, not far from the capitol. This new structure would house state departments that are now scattered over the city and the state capitol would be taken up mainly by the quarters of constitutional officers.

* * *

The legislature quit by leaving the deer hunting season as it is now. The assembly had passed a bill closing the deer season entirely but the senate would not agree to this plan. A conference resulted in the senate passing a bill cutting the deer season to five days and moving it up to the last five days of November instead of the first 10 days of December. But the assembly unanimously voted down this plan.

* * *

Governor Kohler vetoed Northern Lakes and Kettle Moraine parks which were proposed to be purchased with money from the general fund. Governor Kohler pointed out that the conservation commission has a fund of $150,000 with which to purchase forest lands and he said that this money might be used to buy the parks mentioned if they are found suitable. Governor Kohler also vetoed the Carroll bill to have the state share the burden of delinquency of lands in the north. He also declared that this $150,000 fund could be used for the purchase of certain lands in the north, relieving the situation to that extent.

Livestock remedies sold in Wisconsin will now be subject to state supervision. Approval has been given to the Fronek bill requiring that all remedies used in treating livestock diseases must be submitted to the Agricultural College for approval before being sold in the state. The measure was sponsored by Assemblyman Fronek of Langlade county, who claims that it will save millions of dollars to the farmers of the state who have been imposed upon by fraudulent livestock remedies.

* * *

Counties will continue to bear the increasing expense of mothers' pensions in spite of the state law pleading the state to pay one-third of this cost. At the time the law was passed and counties were promised one-third of the cost, the state appropriated $30,000. The appropriation has never been changed. Now it is estimated that if the state were to pay a full third it would take a state appropriation of $500,000 a year, but the legislature has again refused to increase the appropriation.

* * *

The legislature has written 27 new chapters to existing school laws at the session just ended. Several of these new laws deal with the transportation of rural school children, a service on which the state spent $170,000 last year. One new law gives a school board the right to rent a house near a school in which to keep children providing the rental is no greater than the transportation charge would be.

Another law of importance provides for two high school grades in rural schools. Other laws provide for the observance in the schools of Columbus day, Lief Erikson day and Armistice day.

* * *

The state now has the cabinet form of government under a new law that just went into effect. The law wipes out the old office of superintendent of public property, printing board, state department of engineering, cement purchasing commission and creates the bureau of purchases and bureau of engineering. These new bureaus will be in the executive department and their heads will be members of advisory council headed by the governor.

* * *

With about 6,700 people now under state civil service, the old civil service law has been abolished and in its place is the more inclusive provisions of the new bureau of personnel. The new bureau will take in hundreds of state employes who were not formerly required to measure up to these requirements.

* * *

Wisconsin people will vote on another constitutional amendment in 1930, the question involved being whether the governor is to be given the right to veto parts of an appropriation bill without killing the entire measure. This proposal has passed two legislative sessions and will now come to a vote of the people in November, 1930.

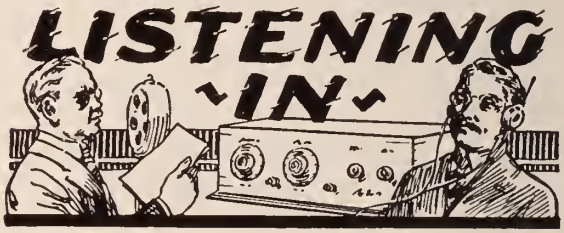
If the referendum question wins popular approval, future governors will have greater power over legislation than ever held before. In any case where a future legislature, under this proposal, passes an appropriation for any department or activity the governor would have the power to cut out any items he saw fit and the bill would stand in its reduced state unless enough legislative votes could be mustered to override the vetoed items.

* * *

Extension of group insurance to labor unions of the state, regardless of their size, promises to be one of the most important insurance laws enacted at this session of the legislature. Labor organizations are already making inquiries as to the methods by which this insurance may be obtained and the extension of this business gives indication of a new field for insurance development.

* * *

The first case to come under the new children's code law is that of Duncan Galston, 14, of Adams, who murdered his father. Under the old law the boy could have been given life imprisonment. Under the new law he ranks merely as a delinquent child and the highest penalty that can be given him is a term in the industrial school for boys at Waukesha until he is 21 years old.



A "RACKET"

A member recently asked the secretary what he could tell him about a life insurance company. The member stated that he was approached by the examiner for this company who stated that they were about to write life insurance and he, the member, would take out a certain policy, he would be made examiner for the company in that city. Investigation at Madison disclosed the fact that the company was not licensed to write life insurance in the state and, as the member suggested, the proposition had the ear-marks of a "racket."

MAIL ORDERS ONLY

Another member wrote the secretary during September asking about a health and accident company that had solicited the physician by mail. He stated that the low rate made him suspicious and he asked for advice. The member was advised that this company could only do business in the state by mail order and that if they asked for a license to do business in the state, in a personal sort of a way, the Wisconsin Department of Insurance would refuse the license on the grounds of insufficient capital, insufficient rates, and inadequate methods of handling their business relations.

"Investigating before investing" proved valuable in each of these two requests and indicates another service that the State Society is glad to perform for its members.

EXCHANGE ADS SUCCESSFUL

Two letters from members who inserted short exchange advertisements in the September Journal arrive in the same mail. The first says that he disposed of the apparatus listed the first day and that letters were still being received. The second member writes "I wish to thank you for publishing my ad in the Physician's Exchange section of the Journal and to let you know that as a result I have had several inquiries and expect to close with one today."

Exchange advertisements of the members are run without charge as a service of the Society.

ECONOMIC SUBJECTS POPULAR

While the total registration of the Madison meeting was but slightly higher than the previous meeting in Madison, some 425 members registered the first day exceeding the first day registration of other meetings by over 150. This is largely attributed to the three papers on medical economics. Members were enthusiastic in their praises of the speakers and subject matter.

DR. DODD SENIOR COUNCILOR

With the resignation of Dr. Edward Evans of La Crosse, Dr. John M. Dodd of Ashland becomes the senior member of the Council. Dr. Dodd was first elected when the reorganization of the Society was completed twenty-six years ago and will have completed twenty-seven years of service when his term expires next September.

CHEESE AT SMOKER

Thanks to Dr. J. F. Mauermann of Monroe, members at the smoker enjoyed several pounds of Green county's finest cheese. It was mightily appreciated, Doctor!

Seven Hundred Attend 88th Anniversary Meeting at Madison; Dr. A. J. McDowell of Soldiers Grove Chosen President-Elect

With a few over 700 registered at the Madison meeting, members were enthusiastic in their favorable comments on every phase of the meeting. The symposium section meetings and the subjects on medical economics, both innovations of the meeting, received unanimous approval of the members and the housing of the entire meeting with all of its varied functions in the new Memorial Union Building combined to make the meeting the most attractive in the history of the Society.

Dr. A. J. McDowell, Soldiers Grove, a former Speaker of the House of Delegates and three times a representative of Crawford County in the State Legislature, was chosen unanimously by the House of Delegates as President-elect of the Society. He will automatically serve as President from September 1930 to September 1931. Dr. Stanley J. Seeger, Milwaukee, was elected Speaker of the House of Delegates in which position he will represent the House on the Council, and Dr. C. A. Harper, State Health Officer, was selected as Vice-Speaker of the House.

Other elections by the House were:

Councilors: Fifth district to succeed Dr. J. L. Shaw, Manitowoc, resigned—Dr. A. H. Heidner of West Bend; Seventh district to succeed Dr. Edward Evans, La Crosse, resigned—Dr. Spencer Beebe, Sparta; Eighth district—Dr. T. J. Redelings, Marinette, reelected; Ninth district—Dr. Joseph F. Smith, Wausau, reelected, and Tenth district—Dr. H. M. Stang, Eau Claire, reelected.

Dr. Joseph F. Smith of Wausau was reelected as delegate to the American Medical Association and Dr. M. D. Bird, Marinette, was named alternate delegate. Milwaukee was named as the place of the 1930 meeting.

Appointments of the incoming President, Dr. F. J. Gaenslen, were confirmed by the House as follows:

Drs. William S. Middleton, Madison, Committee on Scientific Work; Carl Harper, Madison, and S. M. B. Smith, Wausau, Committee on Public Policy; Joseph F. Smith, Wausau, Editorial Board; W. C. Becker, Watertown, Committee on Medical Defense; Francis Murphy, Milwaukee, Committee on Medical Education and Hospitals; T. D. Smith, Neenah, Committee on Medical Economics, and Charles F. Gleason, Manitowoc, Committee on Health and Public Instruction.

Adopting the report of the reference committee on resolutions, the House voted that the question of raising the dues from $10 to $15 lie on the table for one year and that in the mean time each county society meet to

discuss this question with either President Gaenslen or Secretary Crownhart, instructing their delegate at such a meeting as to their wishes.

The Foundation Fund of the Society was completed as to organization when the House adopted an amendment to the by-laws vesting full authority in the Council for the investment and use of interest from this fund. It was also voted that the Council might, if thought wise, receive donations and pay interest on such monies during the life of the donors.

Commending particularly the work of the Committee on Public Policy, the House adopted a report pointing out that not only had the Committee secured enactments favorable to the public health but that in one instance alone had secured savings for the members amounting to $19,000 a year and, moreover, had secured an appropriation from the general fund for the enforcement of acts covering treating the sick as opposed to annual re-registration fees on physicians amounting to $5 a year in many other states.

Adopting the report of the reference committee on reports of officers, the House recommended that the Society stand behind a policy of progress as we are now "at the very door of the period of directive effort where great accomplishments are to be had."

Before the House of Delegates concluded its third and final session a memorial was adopted on the death of Dr. Ernst Copeland, Milwaukee, which occurred while the Society was in session. The House also adopted by a rising vote the following resolution offered by Dr. G. Gundersen, La Crosse, for the delegates of the Seventh district:

"*Whereas,* Dr. Edward Evans of La Crosse, a past president of this organization, for many years chairman of the Council and at all times a tireless and enthusiastic worker for all that is best in medicine, has through illness been forced to resign his position of leadership in this organization, *Be It Resolved,* that he be given a vote of appreciation and gratitude for his years of service to the State Medical Society of Wisconsin, with a sincere hope and wish for a speedy recovery from his illness and that this resolution be made a part of the minutes of this meeting."

LARGE PUBLIC MEETING

Over a thousand gathered on Wednesday evening to hear Dr. Morris Fishbein, Editor of the Journal of the American Medical Association, on "Educating for Health". The annual dinner for members on Thursday evening again presented a capacity audience to hear Dr. William Allen Pusey, a past president of the A. M. A., on "Problems in the Corporate Practice of Medicine."

Addressing the general meeting on the first meeting, over four hundred members heard Dr. Olin West, Secretary and General Manager of the A. M. A., speak on "Opportunities and Trends in the Practice of Medicine." Dr. West spoke for an hour on individual and group problems and at the end of his address received an ovation from the assembly that remained standing to applaud for five minutes.

GOLF PRIZES

At the smoker for the members on Wednesday evening following Dr. Fishbein's address, Dr. Ray Blankinship, Madison, announced the following prizes as result of the pre-session golf tournament:

President's Cup, low gross score, Dr. Ernest W. Miller, Milwaukee, 85.

Second, tied at 86, Drs. E. G. Nylander, Ellsworth; S. R. Mitchell, Milwaukee, and J. E. Rueth, Milwaukee.

Secretary's Cup, low net score, tied Dr. E. S. Elliott, Fox Lake and Dr. Arnold Jackson, Madison at 67. Dr. Jackson won the toss and Dr. Elliott was awarded second prize.

Third, George H. Ewell, Madison.

Low totals on 4, 6 and 13—Dr. R. L. MacCornack, Whitehall.

Low totals on 8, 9 and 14—Drs. D. F. Nauth, Kiel; J. E. Rueth, Milwaukee, and W. J. Frawley, Appleton—tied.

Putting Contest—Drs. H. S. Roby, Milwaukee; F. A. Thayer, Beloit and M. P. Andrews of Manitowoc—tied.

Blind par—tied by Dr. A. I. Rosenberger, Milwaukee and S. R. Mitchell, Milwaukee.

Golfer who spent most time in the rough—Dr. R. C. Buerki, Madison.

Prize for the best dressed golfer was awarded Dr. Frank Weston of Madison who appeared wearing a perforated air cooled cap.

A. J. McDowell, M.D., President-Elect
State Medical Society of Wisconsin

Prize for high total score—Dr. P. H. Rupp of Wauwatosa.

ORGANIZE WOMAN'S AUXILIARY

Upwards of 130 ladies attended the luncheon given in their honor by the State Society on Thursday noon. Immediately following the luncheon Dr. Jessie Allen, Beloit, chairman of the Committee on Organization, introduced Dr. Morris Fishbein who spoke on the aims and need for the Auxiliary. Following Dr. Fishbein's address Mrs. Victor Taugher, Milwaukee, Mrs. Charles Gleason, Manitowoc and Mrs. H. H. Christensen, Wausau were named as a nominating committee to confer with the Society Committee on Organization which consisted of Dr. Jessie Allen, Dr. Eleanore Cushing-Lippitt, Milwaukee and Dr. Elizabeth Comstock, Arcadia.

A model constitution and by-laws was adopted while the Nominating Committee met after which the following officers were elected: President, Mrs. T. L. Harrington, Milwaukee; president-elect, Mrs. C. R. Bardeen, Madison; secretary, Mrs. Homer Carter, Madison; treasurer, Mrs. M. D. Bird, Marinette and parliamentarian, Mrs. E. B. Brown of Beloit. Bridge followed the organization meeting.

RADIOLOGICAL SECTION

At a luncheon meeting of the Radiological Section on Friday noon, Green Bay was selected as the place for the mid-year meeting. The following officers were elected: Chairman, Dr. G. W. Stevens, Milwaukee; vice-chairman, Dr. James Evans, La Crosse; secretary, Dr. F. J. Hodges, Madison and member of the Executive Committee, Dr. F. W. Mackoy, Milwaukee.

ALUMNI LUNCHEONS

Alumni of seven medical schools held luncheon get-together meetings on Thursday noon. Seventy-seven attended the Rush luncheon, Pennsylvania 23; Marquette 64; Michigan 5; Wisconsin 35; Northwestern 30; and Illinois (Chicago P. and S.) 46.

On Wednesday noon a get-acquainted luncheon for women physicians of the state was held at the Loraine Hotel under the direction of Dr. Eleanore Cushing-Lippitt of Milwaukee.

PRESIDENT'S DINNER

Nineteen of twenty-three past presidents of the State Medical Society were guests of the evening at the Annual Dinner of the Society. Those who attended included Drs. G. M. Steele, Oshkosh; W. E. Ground, Superior; Gilbert E. Seaman, Milwaukee; Edward Evans, La Crosse; B. M. Caples, Waukesha; J. M. Dodd, Ashland; A. J. Patek, Milwaukee; T. J. Redelings, Marinette; L. F. Jermain, Milwaukee; H. E. Dearholt, Milwaukee; Gustave Windesheim, Kenosha; C. R. Bardeen, Madison; Sidney S. Hall, Minneapolis; F. Gregory Connell, Oshkosh; Rock Sleyster, Wauwatosa; Wilson Cunningham, Platteville; Joseph F. Smith, Wausau and Arthur W. Rogers of Oconomowoc.

COMMITTEES OF THE HOUSE

Four reference committees of the House were appointed by Speaker Hugh Greeley when the House convened for its first session on Tuesday evening. The Committee on Credentials was composed of E. L. Bradbury, Neillsville, chairman; H. J. Irwin, Baraboo, and H. B. Keland of Racine. Members of the Committee on Reports of Officers were C. J. Smiles, Ashland, chairman; G. Gundersen, La Crosse, and R. L. Cowles of Green Bay. Stanley J. Seeger of Milwaukee was appointed chairman of the committee on Reports of Standing Committees. Other members were C. C. Vogel, Elroy and J. C. Betz of Boscobel. The Committee on Resolutions which committee studied the question of dues was composed of A. J. Wiesender, Berlin, chairman; J. F. Mauermann, Monroe; G. R. Duer, Marinette; M. G. Peterman, Milwaukee and A. S. Thompson of Mount Horeb.

The House selected its own committee on nominations in accordance with custom, one member being selected from each councilor district. Members of this committee were A. E. Bachhuber, Mayville; George Adams, Kenosha; J. F. Mauermann, Monroe; J. C. Betz, Boscobel; Otho Fiedler, Sheboygan; Victor Marshall, Appleton; G. Gundersen, La Crosse; G. R. Duer, Marinette; Erich Wisiol, Stevens Point; F. C. Kinsman, Eau Claire; C. J. Smiles, Ashland and H. W. Powers of Milwaukee.

List of Registrants at 88th Anniversary Meeting

Abelmann, T. C. H. ---------- Watertown
Achard, Lucien ---------- Statesan
Adams, G. F. ---------- Kenosha
Allen, Jessie P. ---------- Beloit
Allen, W. J. ---------- Beloit
Altenhofen, A. R. ---------- Milwaukee
Amundson, K. K. ---------- Cambridge
Anderson, F. G. ---------- Eau Claire
Anderson, N. P. ---------- La Crosse
Andrew, C. H. ---------- Platteville
Andrews, M. P. ---------- Manitowoc
Armstrong, C. A. ---------- Prairie du Chien
Armstrong, C. E. ---------- Oconto
Arneson, Thomas ---------- Almena
Bach, E. C. ---------- Milwaukee
Bach, M. J. ---------- Milwaukee
Bachhuber, A. E., Sr. ---------- Mayville
Bailey, M. A. ---------- Fennimore
Baldwin, F. H. ---------- Bloomington
Ball, E. J. ---------- Nekoosa
Bannen, W. E. ---------- La Crosse
Banyai, A. L. ---------- Wauwatosa
Bardeen, C. R. ---------- Madison
Bassuener, R. O. ---------- Sheboygan
Bauer, K. T. ---------- West Bend
Baumgart, C. H. ---------- Milwaukee
Bear, W. G. ---------- Monroe
Beck, A. A. ---------- Wautoma
Becker, B. A. ---------- Silver Lake
Becker, C. J. ---------- Milwaukee
Becker, W. C. ---------- Watertown
Beebe, C. D. ---------- Sparta
Beebe, C. M. ---------- Sparta
Beebe, S. D. ---------- Sparta
Beffel, J. M., Jr. ---------- Milwaukee
Bellack, B. F. ---------- Columbus
Belting, G. W. ---------- Orfordville
Bennett, L. F. ---------- Beloit
Bennett, L. J. ---------- Ft. Atkinson
Bennett, W. H. ---------- Kenosha
Benson, G. H. ---------- Richland Center
Bentley, J. E. ---------- Portage
Benton, J. L. ---------- Appleton
Benton, R. W. ---------- Whitefish Bay
Bertrand, J. H. ---------- DeForest
Betz, J. C. ---------- Boscobel
Bentzein, E. W. ---------- Milwaukee
Bickel, E. F. ---------- Oshkosh
Bill, B. J. ---------- Genoa City
Bilstad, G. E. ---------- Cambridge
Bird, M. D. ---------- Marinette
Bitter, R. H. ---------- Oshkosh
Black, N. M. ---------- Milwaukee
Blackburn, F. E. ---------- Cassville
Blankinship, R. C. ---------- Madison
Bleckwenn, W. J. ---------- Madison
Blekking, J. H. ---------- Sheboygan Falls
Blewett, M. T. ---------- Markesan
Blumenthal, R. W. ---------- Milwaukee
Blumer, Edward ---------- Monticello
Borsack, K. K. ---------- Fond du Lac
Bourne, N. W. ---------- Milwaukee
Bowen, E. W. ---------- Watertown
Bowen, H. P. ---------- Watertown
Bowing, I. E. ---------- Kenosha
Bowman, F. F. ---------- Madison
Boyd, C. D. ---------- Kaukauna
Boyd, G. T. ---------- Fond du Lac
Bradbury, E. L. ---------- Neillsville
Bradfield, J. A. L. ---------- La Crosse
*Brickbauer, A. J. ---------- Plymouth
Brooks, E. H. ---------- Appleton
Brown, E. B. ---------- Beloit
Brown, G. V. I. ---------- Milwaukee
Bruins, Dirk ---------- Milwaukee
Brussock, W. A. ---------- Milwaukee
Bryan, A. W. ---------- Madison
Buckner, H. M. ---------- Mt. Horeb
Buerki, R. C. ---------- Madison
Burger, H. E. ---------- Beloit
Burns, R. E. ---------- Madison
Burke, M. T. ---------- Kenosha
Burke, Mead ---------- Kenosha
Butler, F. E. ---------- Menomonie
Cahoon, Roger ---------- Baraboo
Cairns, Rolla ---------- River Falls
Caldwell, H. M. ---------- Columbus
Caples, B. M. ---------- Waukesha
Carlsson, E. S. ---------- La Crosse
Carson, W. J. ---------- Milwaukee
Carter, H. M. ---------- Madison
Cary, E. C. ---------- Reedsville
Casper, S. L. ---------- Berlin
Caswell, H. O. ---------- Ft. Atkinson

*Dues being remitted.

Chandler, F. E. ---------- Waupaca
Chandler, J. ---------- Pardeeville
Christensen, F. C. ---------- Racine
Christensen, H. H. ---------- Wausau
Chorlog, J. K. ---------- Madison
Clark, F. T. ---------- Waupun
Clark, W. T. ---------- Janesville
Cleary, B. L. ---------- Edgerton
*Coluccy, M. J. J. ---------- Madison
Comstock, E. ---------- Arcadia
Connell, D. R. ---------- Beloit
Connell, F. Gregory ---------- Oshkosh
Cooksey, R. T. ---------- Madison
Coon, G. W. ---------- Milton Junction
Coon, H. M. ---------- Stevens Point
Copps, L. A. ---------- Marshfield
Cowan, W. F. ---------- Stevens Point
Cowles, R. L. ---------- Green Bay
Cox, A. M. ---------- Albany
Cron, R. S. ---------- Milwaukee
Crosley, G. E. ---------- Milton
Cunningham, Wilson ---------- Platteville
Curtin, J. J. ---------- Milwaukee
Cushing-Lippitt, E. ---------- Milwaukee
Dalton, R. J. ---------- Milwaukee
Darby, G. S. ---------- Brodhead
Dawson, D. L. ---------- Rice Lake
Dean, J. P. ---------- Madison
Dean, Joseph ---------- Madison
Dearholt, H. E. ---------- Milwaukee
Deicher, H. F. ---------- Plymouth
Delaney, H. O. ---------- Beloit
Dennis, J. F. ---------- Waterloo
Devine, G. C. ---------- Ontario
Devine, H. A. ---------- Fond du Lac
Devine, J. C. ---------- Fond du Lac
De Wire, M. V. ---------- Sharon
Dieterle, J. O. ---------- Milwaukee
Dietrich, L. S. ---------- Medford
Dillman, A. E. ---------- Steuben
Docter, John ---------- Racine
Dodd, J. M. ---------- Ashland
Doege, K. H. ---------- Marshfield
Doege, K. W. ---------- Marshfield
Domann, W. C. ---------- Menomonee Falls
Doolittle, J. C. ---------- Lancaster
Drake, F. I. ---------- Madison
Duer, G. R. ---------- Marinette
Dull, C. F. ---------- Richland Center
Dundon, J. R. ---------- Milwaukee
Dunn, A. G. ---------- Blanchardville
Dunn, E. A. A. ---------- Platteville
Echols, C. M. ---------- Milwaukee
Eck, G. E. ---------- Lake Mills
Edmondson, C. C. ---------- Waukesha
Edwards, A. ---------- Reedsburg
Edwards, A. C. ---------- Baraboo
Docter, John ---------- Racine
Edwards, J. B. ---------- Madison
Egloff, L. W. ---------- Pewaukee
Eisenberg, P. J. ---------- Milwaukee
Elliott, E. S. ---------- Fox Lake
Evans, Edward ---------- La Crosse
Evans, James A. ---------- La Crosse
Ewell, G. H. ---------- Madison
Falk, V. S. ---------- Stoughton
Farnsworth, C. P. ---------- Madison
Fazen, L. E. ---------- Racine
Federman, E. H. ---------- Montello
Fencil, Y. J. ---------- Casco
Festerling, E. G. ---------- Milwaukee
Fiebiger, G. J. ---------- Waterloo
Fiedler, O. A. ---------- Sheboygan
Fillbach, H. E. ---------- Hazel Green
Fitzgerald, G. F. A. ---------- Milwaukee
Flynn, R. E. ---------- La Crosse
Focke, W. J. ---------- Poynette
Foley, F. P. ---------- Dorchester
Foley, L. J. ---------- Milwaukee
Forbush, S. W. ---------- Beloit
Ford, W. A. ---------- Sheboygan
Fox, P. A. ---------- Beloit
Francois, S. J. ---------- New Glarus
Frawley, W. J. ---------- Appleton
Frederick, R. H. ---------- West Allis
Fredrick, H. H. F. ---------- Westfield
Fredrick, H. Y. ---------- Westfield
Freeman, J. M. ---------- Wausau
Frisbie, R. L. ---------- Rhinelander
Froelich, J. A. ---------- Milwaukee
Froggatt, W. E. L. ---------- Cross Plains
Fucik, E. J. ---------- Williams Bay
Gaenslen, F. J. ---------- Milwaukee
Gale, J. W. ---------- Madison
Gallaher, D. M. ---------- Appleton
Galloway, A. D. ---------- Barron
Ganser, W. J. ---------- Madison
Gates, A. J. ---------- Tigerton
Gavin, S. E. ---------- Fond du Lac
Geist, F. D. ---------- Madison
Gillette, H. E. ---------- Pardeeville
Glasier, M. B. ---------- Bloomington
Gleason, C. M. ---------- Manitowoc
Gnagi, W. B. ---------- Monroe
Gnagi, W. B., Jr. ---------- Monroe
Goggins, J. W. ---------- Chilton
Gonce, J. E. ---------- Madison
Gramling, H. J. ---------- Milwaukee
Gramling, J. J. ---------- Milwaukee
Graves, L. S. ---------- Mineral Point
Gray, R. J. ---------- Brooklyn
Greeley, H. P. ---------- Madison
Greene, P. F. ---------- Madison
Gregory, W. W. ---------- Stevens Point
Grinde, G. A. ---------- Cumberland
Griswold, F. L. ---------- Mazomanie
Ground, W. E. ---------- Superior
Gudex, V. A. ---------- Milwaukee
Guenther, O. F. ---------- Campbellsport
Guilford, H. M. ---------- Madison
Guilfoyle, J. P. ---------- Evansville
Gundersen, A. H. ---------- La Crosse
Gundersen, G. ---------- La Crosse
Guy, J. E. ---------- Milwaukee
Haberland, E. J. ---------- Milwaukee
Hagerup, T. A. ---------- Dodgeville
Halgren, J. A. ---------- Menomonie
Hall, S. S. ---------- Minneapolis, Minn.
Halsey, R. C. ---------- Lake Geneva
Hammond, F. W. ---------- Manitowoc
Hankwitz, P. G. ---------- Milwaukee
Hansberry, P. H. ---------- Hillsboro
Hansen, John ---------- Glenbeulah
Hargarten, L. J. ---------- Milwaukee
Harper, C. A. ---------- Madison
Harper, C. S. ---------- Madison
Hartman, R. C. ---------- Janesville
Harvey, J. R. ---------- Footville
Harrington, T. L. ---------- Milwaukee
Harris, J. W. ---------- Madison
Hassall, J. C. ---------- Oconomowoc
Hayman, C. S. ---------- Boscobel
Head, L. R. ---------- Madison
Heath, H. J. ---------- Juneau
Hebenstreit, A. J. ---------- Juneau
Heidner, A. H. ---------- West Bend
Hemmingsen, T. C. ---------- Racine
Henes, E. Jr. ---------- Milwaukee
Henika, G. W. ---------- Madison
Henke, W. A. ---------- La Crosse
Heraty, J. E. ---------- La Crosse
Hermann, A. H. ---------- Iron Ridge
Higgins, S. G. ---------- Milwaukee
Hodges, F. J. ---------- Madison
Hogan, J. M. ---------- Oshkosh
Horn, A. S. ---------- Stoughton

Hougen, Edward ---------- Wisconsin Rapids
Howard, M. Q. ---------- Wauwatosa
Howard, T. J. ---------- Milwaukee
Howell, E. C. ---------- Fennimore
Hoyer, A. A. ---------- Beaver Dam
Hudson, R. J. ---------- Prairie du Sac
Hugo, D. G. ---------- Oshkosh
Hummel, W. J. ---------- Ableman
Hyslop, V. B. ---------- Madison
Irwin, G. H. ---------- Lodi
Irwin, H. J. ---------- Baraboo
Irwin, R. H. ---------- Lodi
Jackson, Arnold ---------- Madison
Jackson, J. A., Jr. ---------- Madison
Jackson, R. H. ---------- Madison
Jegi, H. A. ---------- Galesville
Jenner, J. A. ---------- Milwaukee
Jermain, L. F. ---------- Milwaukee
Jermain, W. M. ---------- Milwaukee
Jewell, E. L. ---------- Loganville
Johnson, F. G. ---------- Iron River
Johnson, H. C. ---------- Madison
Jones, G. S. ---------- Wauwatosa
Jones, W. J. ---------- La Crosse
Jorgensen, P. P. M. ---------- Kenosha
Kane, J. J. ---------- Prairie du Chien
Karnopp, G. L. ---------- Wautoma
Karsten, J. H. ---------- Horicon
Kasten, H. E. ---------- Beloit
Kauth, P. M. ---------- Slinger
Kay, H. M. ---------- Madison
Keenan, H. A. ---------- Stoughton
Keithley, J. A. ---------- Palmyra
Keithley, J. W. ---------- Beloit
Keland, H. B. ---------- Racine
Kelly, D. M. ---------- Baraboo
Kenney, G. F. ---------- Milwaukee
King, J. M. ---------- Milwaukee
Kinsman, F. C. ---------- Eau Claire
Knauf, N. J. ---------- Chilton
Knox, E. S. ---------- Green Bay
Knutson, O. ---------- Osseo
Koch, V. W. ---------- Janesville
Koehler, A. G. ---------- Oshkosh
Kosanke, F. E. ---------- Fond du Lac
Kraut, E. ---------- Lancaster
Kristjanson, H. T. ---------- Milwaukee
Krohn, Robert ---------- La Crosse
Krueger, B. ---------- Cudahy
Kuegle, F. H. ---------- Janesville
Kurtz, C. M. ---------- Madison
Ladewig, H. C. ---------- Milwaukee
Lalor, J. C. ---------- Sauk City
Lambert, J. W. ---------- Antigo
Lando, Maxwell ---------- Mendota
Lauder, C. E. ---------- Viroqua
Lawrence, H. W. ---------- Janesville
Leaper, W. E. ---------- Green Bay
Lee, J. H. ---------- Madison
Leicht, P. ---------- Lake Mills
Leland, A. M. ---------- Whitewater
Lettenberger, J. ---------- Milwaukee
Lewis, Marion ---------- Milwaukee
Lindsay, W. T. ---------- Madison
Linn, W. N. ---------- Oshkosh
Lippitt, S. H. ---------- Milwaukee
Littig, L. V. ---------- Madison
Lockhart, C. W. ---------- Mellen
Long, C. W. ---------- Milwaukee
Longley, J. R. ---------- Fond du Lac
Lorenz, W. F. ---------- Madison
Lotz, Oscar ---------- Milwaukee
Loughlin, T. F. ---------- Hartford
Lowe, J. W. ---------- Merrillan
Ludden, R. H. ---------- Viroqua
Lueck, G. W. ---------- La Crosse
Lungmus, B. A. ---------- Milwaukee
Lynch, G. V. ---------- Oshkosh
Lynch, H. M. ---------- Allenton
Maas, W. C. ---------- Rio
MacArthur, D. S. ---------- La Crosse
MacCornack, R. L. ---------- Whitehall
MacInnis, F. E. ---------- Milwaukee
Mackoy, F. W. ---------- Milwaukee
MacLaren, J. B. ---------- Appleton
Madison, F. W. ---------- Milwaukee
Majerus, P. J. ---------- Ft. Atkinson
Marek, F. B. ---------- Racine
Marsh, H. E. ---------- Madison
Marsh, J. M. ---------- Elkhorn
Marshall, V. F. ---------- Appleton
Masten, M. G. ---------- Madison
Mauermann, J. F. ---------- Monroe
May, J. V. ---------- Marinette
Mayfield, A. L. ---------- Kenosha
McCann, Edith ---------- Milwaukee
McCarthy, H. C. ---------- Richland Center
McCormick, S. A. ---------- Madison
McDowell, A. J. ---------- Soldiers Grove
McGrath, E. ---------- Baraboo
McGrath, E. F. ---------- Appleton
McGuire, W. H. ---------- Janesville
Metts, J. C. ---------- Milwaukee
McIntosh, R. L. ---------- Madison
McLaughlin, H. J. ---------- Bloomington
McMahon, A. E. ---------- Glenwood City
McMahon, H. O. ---------- Milwaukee
McMahon, J. P. ---------- Milwaukee
McQuillin, E. D. ---------- New Glarus
Metcalf, G. S. ---------- Janesville
Meusel, H. H. ---------- Oshkosh
Middleton, W. S. ---------- Madison
Miller, E. W. ---------- Milwaukee
Miller, H. C. ---------- Racine
Miller, H. C. ---------- Whitewater
Miller, W. J. ---------- Madison
Miller, W. P. ---------- Milwaukee
Miloslavich, E. L. ---------- Milwaukee
Milson, Louis ---------- Green Bay
Mitchell, F. W. ---------- Ogema
Mitchell, R. E. ---------- Eau Claire
Mitchell, S. R. ---------- Milwaukee
Moe, H. B. ---------- Blanchardville
Montgomery, R. B. ---------- La Valle
Montgomery, R. C. ---------- Madison
Moon, J. F. ---------- Baraboo
Morris, K. A. ---------- Merrill
Morris, R. C. ---------- Ft. Atkinson
Morris, S. I. ---------- Madison
*Morrison, J. T. ---------- Madison
Morter, R. E. ---------- Milwaukee
Morton, H. H. ---------- Cobb
Mowry, W. A. ---------- Madison
Mudroch, J. A. ---------- Columbus
Mullen, R. A. ---------- East Troy
Munn, W. A. ---------- Janesville
Murphy, F. D. ---------- Milwaukee
Murphy, G. F. ---------- Stratford
Nadeau, A. T. ---------- Marinette
Nauth, D. F. ---------- Kiel
Neidhold, C. D. ---------- Appleton
Neilson, G. W. ---------- Milwaukee
Nesbit, W. M. ---------- Madison
Nicely, W. E. ---------- Waukesha
Nichols, W. T. ---------- Milwaukee
Nixon, H. G. B. ---------- Hartland
Nixon, R. T. A. ---------- Brookfield
Noble, J. B. ---------- Waukesha
Notbohm, W. R. ---------- Sullivan
Nuzum, T. O. ---------- Janesville
Nuzum, T. W. ---------- Janesville
Nylander, E. G. ---------- Ellsworth
Nystrum, L. E. ---------- Medford
Oberembt, B. ---------- Milwaukee
O'Brien, J. M. ---------- Oregon
O'Connor, W. F. ---------- Ladysmith

O'Donovan, T. W. ____ Milwaukee
O'Hora, C. M. ____ Excelsior
O'Leary, T. J. ____ Superior
Oliver, T. J. ____ Green Bay
Olmsted, A. O. ____ Green Bay
Olson, A. L. ____ Stoughton
Overton, O. V. ____ Janesville
Panetti, P. A. ____ Hustisford
Parke, Geo. ____ Viola
Patek, A. J. ____ Milwaukee
Pease, W. A., Jr. ____ Rio
Perlman, Henry B. ____ Belleville
Peterman, M. G. ____ Milwaukee
Peters, H. A. ____ Oconomowoc
Peterson, C. F. ____ Independence
Peterson, E. F. ____ Wauwatosa
Peterson, L. W. ____ Sun Prairie
Peterson, M. G. ____ Lake Mills
Pfefferkorn, E. B. ____ Oshkosh
Pfisterer, Frank W. ____ Markesan
Pierce, D. F. ____ Hales Corners
Pink, J. J. ____ Milwaukee
Pippin, B. I. ____ Richland Center
Pleyte, A. A. ____ Milwaukee
Podlasky, H. B. ____ Milwaukee
Pomainville, Geo. J. ____ Nekoosa
Pomainville, Frank X. ____ Wisconsin Rapids
Pope, F. W. ____ Racine
Poser, E. M. ____ Columbus
Potter, R. P. ____ Marshfield
Powers, H. W. ____ Milwaukee
Pratt, Helen E. ____ Oconomowoc
Prees, R. L. ____ No. Fond du Lac
Prentiss, Pearce ____ South Wayne
Puestow, K. L. ____ Madison
Pugh, Geo. J. ____ No. Milwaukee
Purdy, F. P. ____ Mukwonago
Quisling, Sverre ____ Madison
Rassoch, Halfdan ____ Nelsonville
Radloff, A. C. ____ Plymouth
Randall, M. W. ____ Blue River
Raube, H. A. ____ Beloit
Rauch, W. A. ____ Valders
Ravn, E. O. ____ Merrill
Reagles, Robt. ____ Arlington
Reay, G. R. ____ La Crosse
Redelings, T. J. ____ Marinette
Reese, Hans H. ____ Madison
Rehorst, J. J. ____ Fond du Lac
Reineck, C. ____ Appleton
Remer, W. H. ____ Chaseburg
Reynolds, Bertha ____ Lone Rock
Richards, C. G. ____ Kenosha
Riopelle, W. G. ____ Beaver Dam
Riordan J. F. ____ Kenosha
Ritchie, G. A. ____ Appleton
Robbins, J. Holden ____ Madison
Roby, Harlow S. ____ Milwaukee
Rodecker, R. C. ____ Mercer
Rogers, A. W. ____ Oconomowoc
Romberg, Henry A. ____ Oshkosh
Rosenberger, A. I. ____ Milwaukee
Rosenheimer, A. M. ____ Beaver Dam
Rosholt, J. A. ____ La Crosse
Rueth, J. E. ____ Milwaukee
Ruffalo, A. F. ____ Kenosha
Rupp, Paul H. ____ Wauwatosa
Russell, R. J. ____ Milwaukee
Sachse, F. W. ____ Hartford
Sargent, James C. ____ Milwaukee
Saunders, O. W. ____ Green Bay
Satter, O. E. ____ Prairie du Chien
Schacht, Roland J. ____ Racine
Scheele, F. M. ____ Waukesha
Schell, Ida L. ____ Milwaukee
Schemmer, A. L. ____ Colby
Schiek, I. E. ____ Rhinelander
Schlapik, A. ____ Kenosha
Schlomovitz, B. H. ____ Milwaukee
Schlossmann, B. ____ South Milwaukee
Schmeling, A. F. ____ Columbus
Schmidt, Erwin ____ Madison
Schneiders, E. F. ____ Madison
Schneller, E. J. ____ Racine
Scholz, Herbert F. ____ Thiensville
Schubert, C. K. ____ Madison
Schuldt, C. M. ____ Platteville
Schumm, H. C. ____ Milwaukee
Seaman, Gilbert E. ____ Milwaukee
Seeger, Stanley J. ____ Milwaukee
Sexton, W. G. ____ Marshfield
Shapiro, L. M. ____ Kendall
Sharpe, H. A. ____ Verona
Sharpe, H. R. ____ Fond du Lac
Sheldon, W. H. ____ Madison
Shepard, E. L. ____ Brandon
Simon, L. J. ____ Fond du Lac
Sisk, I. R. ____ Madison
Sisk, J. N. ____ Madison
Skemp, A. A. ____ La Crosse
Slemmons, Theo. M. ____ Argyle
Sleyster, Rock ____ Wauwatosa
Smiles, C. J. ____ Ashland
Smith Chas. E. ____ Beloit
Smith, E. A. ____ Milwaukee
Smith, E. V. ____ Fond du Lac
Smith, Jos. F. ____ Wausau
Smith, Woodruff ____ Ladysmith
Southwick, F. A. ____ Stevens Point
Spiegelberg, E. H. ____ Boscobel
Sprague, L. V. ____ Madison
Sproule, Ralph ____ Milwaukee
Squier, T. L. ____ Milwaukee
Squire, C. A. ____ Sheboygan
Stack, S. S., Jr. ____ Milwaukee
Stack, S. S. ____ Milwaukee
Stebbins, W. W. ____ Madison
Steele, G. M. ____ Oshkosh
Stevens, G. W. ____ Milwaukee
Stevens, John V. ____ Janesville
Stirn, F. J. ____ Dubuque, Ia.
Stoddard, C. H. ____ Milwaukee
Stout, Richard B. ____ Madison
Stovall, W. D. ____ Madison
Studley, F. C. ____ Milwaukee
Sullivan, A. G. ____ Madison
Sullivan, Eugene S. ____ Madison
Sullivan, W. E. ____ Madison
Sumner, W. C. ____ Edgerton
Supernaw, Jack S. ____ Madison
Swartz, K. A. ____ Waupun
Szlapka, T. L. ____ Milwaukee
Taugher, V. J. ____ Milwaukee
Taylor, A. R. ____ Brodhead
Taylor, J. Gurney ____ Milwaukee
Taylor, W. A. ____ Portage
Teitgen, Arthur ____ Manitowoc
Teschner, P. A. ____ Milwaukee
Thayer, F. A. ____ Beloit
Thill, D. P. ____ Milwaukee
Thompson, A. S. ____ Mt. Horeb
Thompson, F. A. ____ Milwaukee
Tibbitts, U. J. ____ Waukesha
Tierney, E. F. ____ Portage
Toepfer, R. A. ____ West Allis
Tormey, A. R. ____ Madison
Tormey, T. W. ____ Madison
Townsend, E. H. ____ La Crosse
Treadwell, G. F. ____ Friendship
Tryon, F. E. ____ Baraboo
Tucker, W. J. ____ Ashland
Turgasen, F. E. ____ Manitowoc
Twohig, D. J. ____ Fond du Lac
Twohig, H. E. ____ Fond du Lac
Twohig, J. Elmer ____ Fond du Lac
Van Altena, L. A., Jr. ____ Cedar Grove

VanKirk, Frank W. ---------- Janesville
Van Valzah, Robt. ---------- Madison
Vedder, J. B. ---------- Marshfield
Venning, J. R. ---------- Ft. Atkinson
Verbrick, W. C. ---------- Wayside
Vingom, C. O. ---------- Madison
Vogel, C. C. ---------- Elroy
Waite, W. S. ---------- Watertown
Walker, H. M. ---------- Dodgeville
Warfield, L. M. ---------- Milwaukee
Waters, Don ---------- Wisconsin Rapids
Waters, Ralph ---------- Madison
Wear, John B. ---------- Madison
Webb, E. P. ---------- Beaver Dam
Weber, C. J. ---------- Sheboygan
Weber, F. T. ---------- Arcadia
Webb, Harvey E. ---------- Milwaukee
Weed, L. G. ---------- Phelps
Weiland, H. P. ---------- Verona
Welke, E. G. ---------- Madison
Wenstrand, D. E. W. ---------- Milwaukee
Werner, H. C. ---------- Mendota
Werra, M. J. ---------- Waukesha
Werrell, W. A. ---------- Madison
Weston, F. L. ---------- Madison
Wheeler, W. P. ---------- Oshkosh
Wiesender, A. J. ---------- Berlin
Wiley, F. S. ---------- Fond du Lac
Wilkinson, J. F. ---------- Oconomowoc
Wilkinson, M. R. ---------- Oconomowoc
Willett, T. ---------- West Allis
Williams, W. B. ---------- Argyle
Wiltrout, Irving D. ---------- Chippewa Falls
Windesheim, G. ---------- Kenosha
Wing, W. S. ---------- Oconomowoc
Wisiol, Erich ---------- Stevens Point
Witte, Dexter H. ---------- Milwaukee
Wochos, W. M. ---------- Kewaunee
Wolf, H. E. ---------- La Crosse
Wood, C. A. ---------- Madison
Woodhead, F. J. ---------- Waukesha
Wright, J. C. ---------- Antigo
Yates, J. L. ---------- Milwaukee
Zohlen, J. P. ---------- Sheboygan

GUESTS

Jackson, J. W. ---------- Madison
Paul, Francis ---------- Waupun
Bast, T. H. ---------- Madison
Pusey, Wm. A. ---------- Chicago, Ill.
McBain, L. B. ---------- Madison
Mossman, H. W. ---------- Madison
Noer, R. J. ---------- Wabeno
Eisele, P. L. ---------- Ripon
Baldwin, R. M. ---------- Madison
Richards, R. R. ---------- Whitehall
Maresh, F. ---------- Madison
Stevens, R. ---------- Madison
Walton, Wm. B. ---------- Milwaukee
Turkeltaub, S. M. ---------- Milwaukee
West, Olin ---------- Chicago, Ill.
Whalen, C. J. ---------- Chicago, Ill.
Carns, M. L. ---------- Knoxville, Ill.
Mundt, G. Henry ---------- Chicago, Ill.
Fredrickson, F. O. ---------- Chicago, Ill.
Leach, M. A. ---------- Milwaukee
Stockton, W. C. ---------- Milwaukee
McClintic, C. F. ---------- Detroit, Mich.
Kretschmer, H. L. ---------- Chicago, Ill.
Butt, W. E. ---------- Viroqua
Furlong, T. F., Jr. ---------- Madison
Margoles, Max ---------- Madison
Hirschboeck, F. J. ---------- Duluth, Minn.
Corscot, C. M. ---------- Madison
Boner, A. J. ---------- Madison
Fischer-Wasels, B. ---------- Germany
Lange, Eugene ---------- Madison
Hyre, C. A. ---------- Cleveland, O.
Garvey, J. L. ---------- Ann Arbor, Mich.
Ellis, G. M. ---------- Milton
Major, R. H. ---------- Kansas City, Mo.
Laemle, R. M. ---------- Marshfield
Chorlog, J. I. ---------- Madison
Oliver, J. B. ---------- Green Bay
Hoffman, E. F. ---------- Madison
Ebert, R. O. ---------- Oshkosh
Fein, N. N. ---------- Madison
Phillips, C. M. ---------- Madison
Hutchinson, E. ---------- Madison
Calvert, Charlotte J. ---------- Madison
Adson, A. W. ---------- Rochester, Minn.
Smith, G. H. ---------- Columbus, O
Lewis, A. J. ---------- Henning, Minn.
Guyer, M. F. ---------- Madison
Pearman, A. ---------- Rockford, Ill.
Risteen, W. A. ---------- Milwaukee
Lemmer, K. E. ---------- Milwaukee
Sander, O. A. ---------- Pittsburgh, Pa.
Rauch, A. M. ---------- Burlington
Springberg, J. C. ---------- Madison
Schulak, Irving ---------- Madison
Lieberman, B. ---------- Milwaukee
Evans, J. R. ---------- Racine
Lapp, H. D. ---------- Milwaukee
Bork, A. L. ---------- Milwaukee
Kleinpell, W. C. ---------- Madison
Kaska, G. J. ---------- Madison
Watson, E. L. ---------- Madison
Musser, J. H. ---------- New Orleans, La.
Hall, E. C. ---------- Milwaukee
Bryan, A. L. ---------- Muscatine, Ia.
Hermann, W. C. ---------- Milwaukee
Tuft, W. R. ---------- Madison
Hardgrove, T. H. ---------- Fond du Lac
Wahl, H. R. ---------- Kansas City, Mo.
Swanson, A. M. ---------- Rockford, Ill.
Beatty, H. P. ---------- Madison
Beck, W. B. ---------- Chicago, Ill.
Ritchie, Gorton ---------- Madison
Pawlisch, O. V. ---------- Reedsburg
Gordon, F. T. ---------- Portage
Weeks, F. D. ---------- Madison
Brewer, J. B. ---------- Jefferson
Gapadze, I. I. ---------- Madison
Keene, L. M. ---------- Lac du Flambeau
Steel, M. R. ---------- Madison
Willett, D. ---------- Madison
Strauss, A. A. ---------- Chicago, Ill.
Perssion, L. ---------- Milwaukee
Eisenberg, J. A. ---------- Milwaukee
Bayley, W. E. ---------- Rockford, Ill.
Lyght, Charles ---------- Madison
Gruesen, H. A. ---------- Madison
Ohlsen, M. ---------- Madison
Sutherland, C. G. ---------- Rochester, Minn.
Grunke, E. H. ---------- Madison
Gundersen, S. M. ---------- La Crosse
Wier, J. S. ---------- Fond du Lac
Bancroft, H. V. ---------- Blue Mounds
Hudson, L. A. ---------- Sauk City
Wylie, F. M. ---------- Madison
Holmes, F. L. ---------- Madison
Aurner, R. R. ---------- Madison
Davis, Loyal ---------- Chicago, Ill.
Fishbein, Morris ---------- Chicago, Ill.
Jones, H. O. ---------- Chicago, Ill.
Heuer, George ---------- Cincinnati, O.
Barcroft, Joseph ---------- Cambridge, England

Auxiliary Registration

Mrs. Wm. G. Domann—Menomonee Falls
Mrs. Homer M. Carter—Madison
Mrs. Karl Borsack—Fond du Lac
Mrs. L. F. Bennett—Beloit
Mrs. H. J. Bennett—Madison
Mrs. F. E. Chandler—Waupaca
Mrs. Mary K. Prentiss—South Wayne
Mrs. Louise McArthur Mears—La Crosse
Mrs. B. L. Cleary—Edgerton
Mrs. H. A. Keenan—Stoughton
Mrs. George Ewell—Madison
Mrs. D. L. Dawson—Rice Lake
Mrs. Albert Tormey—Madison
Mrs. Harold Marsh—Madison
Mrs. Eugene Sullivan—Madison
Mrs. F. W. Mitchell—Ogema
Mrs. H. E. Gillette—Pardeeville
Mrs. L. J. Simon—Fond du Lac
Miss Gertrude Allen—Beloit
Mrs. R. B. Montgomery—La Valle
Mrs. Dexter Witte—Milwaukee
Mrs. Victor Taugher—Milwaukee
Mrs. T. W. Nuzum—Janesville
Mrs. C. M. Corscot—Madison
Mrs. H. B. Nixon—Hartland
Mrs. F. J. Woodhead—Waukesha
Mrs. W. P. Wheeler—Oshkosh
Mrs. J. M. Hogan—Oshkosh
Mrs. H. S. Roby—Milwaukee
Mrs. B. M. Caples—Waukesha
Mrs. Allen R. Taylor—Brodhead
Mrs. G. S. Darby—Brodhead
Mrs. J. H. Bertrand—DeForest
Mrs. G. H. Reay—La Crosse
Mrs. George D. Reay—La Crosse
Mrs. Ada B. Chandler—Pardeeville
Mrs. B. J. Bill—Genoa City
Mrs. M. V. DeWire—Sharon
Mrs. E. B. Pfefferkorn—Oshkosh
Mrs. W. J. Ganser—Madison
Mrs. Anna B. Farnsworth—Madison
Mrs. Alice B. Benson—Richland Center
Mrs. J. W. Keithley—Beloit
Mrs. E. B. Brown—Beloit
Mrs. Ralph Waters—Madison
Mrs. Orcott—Madison
Mrs. S. W. Forbush—Beloit
Mrs. C. E. Smith—Beloit
Mrs. T. J. Snodgrass—Janesville
Mrs. Ochsner Nuzum—Janesville
Mrs. R. P. Potter—Marshfield
Mrs. George Crownhart—Madison
Mrs. E. A. A. Dunn—Platteville
Mrs. J. W. Lowe—Merrillan
Mrs. S. D. Beebe—Sparta
Mrs. C. M. Gleason—Manitowoc
Mrs. G. A. Grinde—Cumberland
Mrs. A. C. Edwards—Baraboo
Mrs. K. K. Amundson—Cambridge
Mrs. G. E. Bilstad—Cambridge
Mrs. M. D. Bird—Marinette
Mrs. Robert Cowles—Green Bay
Mrs. Herbert Christensen—Wausau
Mrs. K. A. Swartz—Waupun
Mrs. W. G. Bear—Monroe
Mrs. W. B. Gnagi—Monroe
Mrs. Agnes Beck—Wautoma
Mrs. Lichtenberg—Wautoma
Mrs. H. F. Frederick—Westfield
Mrs. George Parke—Viola
Mrs. T. L. Harrington—Milwaukee
Mrs. F. I. Drake—Madison
Mrs. H. W. Lawrence—Janesville
Mrs. H. B. Moe—Blanchardville
Miss Gladys Gilbertson—Blanchardville
Mrs. J. Holden Robbins—Madison
Mrs. Gorton Ritchie—Madison
Mrs. C. J. Becker—Milwaukee
Mrs. W. A. Werrell—Madison
Mrs. F. R. Krembs—Stevens Point
Mrs. Mark J. Bach—Milwaukee
Mrs. J. Francois—New Glarus
Mrs. John Bentley—Portage
Mrs. A. C. Radloff—Plymouth
Mrs. H. F. Deicher—Plymouth
Mrs. S. L. Casper—Berlin
Mrs. P. Eisele—Ripon
Mrs. R. J. Dalton—Milwaukee
Mrs. L. F. Jermain—Milwaukee
Mrs. Wm. F. Jermain—Milwaukee
Mrs. C. R. Bardeen—Madison
Mrs. J. F. Wilkinson—Oconomowoc
Mrs. E. J. Fucik—Williams Bay
Mrs. A. M. Rosenheimer—Beaver Dam
Miss Frances Gramling—Milwaukee
Miss Margaret Gramling—Milwaukee

The Physicians Service Bureau and the Milwaukee County Medical Society

The special monthly meeting of the Milwaukee County Medical Society convened at eight o'clock P. M., May 10, 1929, in the Red Room of the Hotel Pfister, Milwaukee, the principal topic for discussion being the function of a Physicians Service Bureau.

William J. Burns, L. L. B., Executive Secretary, Toledo Academy of Medicine, Toledo, Ohio, was the principal speaker of the evening, the subject being thrown open for general discussion following Mr. Burns' address.

Your Program Committee has been very kind in inviting me here to give you a few slants upon our academy work and problems, and upon some exceptional activities that have developed at first hand under our eyes, and which I feel have a growing influence on every individual medical society in the country. To detail these items without boring you, let me give you a typical day at our desk in the Academy Building, with a few necessary interpellations.

The Executive Secretary arrived at the office of the Academy of Medicine to find a generous pile of mail awaiting his attention. By nine A. M. he had dictated letters to three citizens who had submitted questions on med-

ical subjects. He answered that their inquiries would be submitted to the Education Committee for reply, and would be published in the daily newspaper column at an early date; he had acknowledged the two applications for membership; he had thanked the New York pharmaceutical house for its new contract to advertise in the Academy Bulletin; he had sent a note of appreciation to the Better Business Bureau for its report on the "quack" who had recently opened an office on the East side; he had requested the State Medical Board to proceed against this individual who was practicing medicine without a license. He had written the telephone company to eliminate the druggist's name which appeared in the telephone directory under the heading, "Physicians and Surgeons M. D."

The telephone bell rang. It was a physician on the North side who desired information on the Merchants' Credit Bureau. This doctor was told that the Academy of Medicin ewas affiliated as a member of the Merchants' Credit Bureau, which offered three distinct services to every individual member of the Academy; first, credit ratings on every patient who visited the doctor's office; (these could be obtained in case a physician doubted the paying ability or paying inclination of his patient) second, the delinquent account letter service, whereby a series of letters would be mailed by the bureau to slow-pay patients to aid the doctor's collections; third, the collection division offered its dependable help to the physician who wished to have his older accounts adjusted or settled. The North side member procured the telephone number of the Merchants' Credit Bureau to call and ask its assistance.

Then Dr. A. C. W.'s nurse visited the executive office to ask for another copy of Bulletin Number Seven of the "Confidential List For Members Only." This confidential list, added to monthly, contains the names of several hundred people with whom Academy members have experienced unsatisfactory financial relations. (This is sometimes referred to as the dead beat list, and of course is in code to eliminate the possibility of lawsuits.) Dr. A. C. W. desired to keep the list permanently so that he could study it whenever a new and questionable patient appeared for service. Incidentally I might say that this particular doctor has fortunately made investments in real estate worth from five to six hundred thousand dollars. He believes in this dead beat list to the extent that when a new patient, of whom he is skeptical, enters his office he immediately says, "How many doctors do you already owe in town?" He then looks the particular party up on the dead beat list.

Mr. Harry Dowd of the X Insurance Company dropped in the office to add another physician's name to the growing list of contributors of the Academy Foundation. This name brought the number to sixty-four Academy members who had each taken out a thousand dollar insurance policy, making the Academy Foundation the sole beneficiary.

Here is a side light that deserves a bit more than passing notice. It is a tribute to the vision and altruism of Toledo doctors. Their plan deserves emulation by other academies in the country. The purpose behind it is the creation of a $300,000 endowment fund for research. At first blush this seems like a large figure and one almost impossible of accomplishment. How the idea has captured attention and sold itself on its merits is illustrated by the fact that sixty-four doctors are now numbered on its bequest insurance list. In addition, several cash contributions and generous provisions in wills have been made. The interest from this fund will be used strictly for research. The Foundation is to be administered by a Special Endowment Fund Committee and a trust company in true legal style. The principal is not to be distributed unless it exceeds expectations and reaches the million dollar mark; then ten per cent of the capital may be used annually for research.

Nothing more altruistic can be conceived than the creation of and contribution towards a fund of this sort by doctors. There will be no return to themselves. It is entirely a gift to the public for its better health and increased longevity. We all know there are still some unsolved problems in medicine. The toll from cancer, pneumonia, and tuberculosis is still on the increase. Much midnight oil has been burned

in the attempt to penetrate the secrets of these three diseases. Who knows but that from this Foundation a Pasteur, an Ehrlich or a Carrell may be developed. The idea is the establishment of a miniature Rockefeller Foundation with all the noble purposes and ideals behind such an organization.

After Mr. Dowd's departure a telephone call from Dr. M. W. A. was received by the Executive Secretary. The doctor was making out his income tax report. Could he, he asked, take as a deduction the legal expense incurred in fighting a malpractice suit which had been inflicted upon him during the past year. He was made very happy in the knowledge that this was an allowable deduction, and he took down the exact citation in order that there would be no question concerning his report when the same reached the income tax office.

Dr. M. A. C. visited the executive office with three short medical essays for publication in the Academy newspaper column which is entitled, "Said by Toledo Doctors." This contributor was thanked, told that the Publications Bureau would look over his essays and forward them to the newspaper where they would soon appear. The visitor commented on the Popular Medicine movement which had been at work here during the past three years. He stated that his contribution was intended as an approbation of this good work.

The South Side League of Women Voters telephoned to secure a speaker for their meeting of the following month. They desired a talk on "Health and Sanitation." The lady was informed that the request would be placed before the Speakers' Bureau of the Academy and a doctor would be chosen for the assignment in plenty of time for announcements and printing of programs.

Reference to these two incidents calls attention at once to the Education Committee work. This has developed from small beginnings into a very influential organization. It was my privilege to see it throughout its numerous stages. For years back several of the more foresighted members of the Academy realized the value of a program of popular medical education. It remained simply to put it into being. Numerous meetings were held over the luncheon table to discuss ways and means. At one notable meeting back in 1924 the officers decided finally that problems dealing with clinic abuse, contract practice, unethical conduct, fraudulent advertising, quackery, misinformation of the public on matters of health, and a host of other things could be best met by broadcasting firsthand the doctors' viewpoint on these medical matters. This was a departure from the old notion of keeping silence on such matters from a mistaken idea of ethics. This position is hardly tenable. The distinction has well been made between advertising which is closed to the physician as an individual and publicity which is open to the profession as a whole. Not all the members, however, were sold on the soundness of the idea. You gentlemen probably will encounter the same condition in your own ranks, yet it is clear that your responsibility as guardians of the public health demands that you take more than a passive interest in such matters. In addition, your acceptance of this obligation will result in increasing your financial as well as your scientific revenue.

Our officers decided definitely on the necessity of forming an Education Committee to look after these matters in point. Such a committee would bring about a better relation between the public and the profession, which would be of advantage to both.

Then about this time came the Saturday Evening Post's editorial entitled, "Good News Suppressed," which acted as a further incentive towards the creation of such a committee. The Post shouted to its millions of readers: "Doctors are bond slaves of a vocabulary drawn from the dead languages. Our physicians and surgeons are fairly boiling over with important information which they desire to communicate to the general public, but somehow they lack the simple racy English in which to get it over or the sense of form and accent which would make it interesting and attractive. The enlightened physician is fully alive to the educative powers of the newspaper and periodical press but he does not know how to use the mighty engine he has so long despised."

The effect of this article is obvious. In our narrowed lives we fail often to get proper

prospective. An opinion here and there which does not come from a particularly eminent source may not sway us, but when such a well-known periodical as the Saturday Evening Post takes up the cudgels and berates the medical profession with such a pronouncement, it behooves it to take stock.

The beginning of Popular Medical Education in Toledo was made early in 1926 with weekly medical articles in two of the leading newspapers. The committee's plans were visionary. It had no precedent to follow. Few realized its possibilities. The first year was spent mainly in building up experience and gaining contacts. It can truthfully be said that it sold the idea of honest guidance and authentic information in medical matters to the newspapers and the public. This was a worth while accomplishment. But the committee quickly realized that the infrequency of appearance of its articles would lose force. Plans were set afoot to publish a daily medical article. This was a radical innovation in newspaper circles. True it is that daily newspaper articles, treating on medicine, had appeared previously in syndicated form. These, however, reflected only individual opinion in medicine. The "Said by Toledo Doctors" column, with its daily article, attempted to reflect the accepted opinion of the bulk of the medical profession. In this respect, it has pioneered.

On February 27, 1927, the new column was inaugurated. During the next two years a daily article was printed, followed by a Question Box. Academy members submitted articles to the Education Committee which revised and edited them to fit into the program. Numerous instances occurred in which certain articles were found unsuitable for publication because they emphasized too strongly pet theories at variance with general opinion. It is desirable to secure articles from as many of the members as possible. A series of articles, for instance, dealing with pediatric problems, another series dealing with ear, nose and throat problems, another on orthopedics, and so on, produce a better program and affect more of the reading public. Where the interest of the Society permits such a plan it is of course ideal. Where failure of cooperation interferes with such a course, this should not discourage the fulfillment of the program. In every society a few enterprising men can be found to substitute for the uninterested.

It must be remembered that these articles, while authoritative and truthful, are not written for the medical profession. They may not therefore be exhaustive of a subject. They are written for the public. They should be snappy and touch only highlights. It is better to drive home a few salient points that will stick than a wealth of details and data that will be uninteresting and soon forgotten. Self-diagnosis and self-medication should be discouraged. The motto throughout should be: "See Your Doctor First."

Realizing that the Speakers' Bureau was a necessary adjunct to the work of the Publications Bureau, this department was formed in 1927. For the first half year it worked sporadically. But the profession realized that the Speakers' Bureau was a powerful and valuable arm in bringing the medical man in direct contact with the public, so a concerted effort was made to boom this feature.

The result was that during 1928, the period of its greatest activity, the Speakers' Bureau sent out an average of ten lecturers each month to address lay organizations, civic clubs, etc. The public seems to be hungry for information dealing with its health. These two departments, the Publication Bureau and the Speakers' Bureau, have a far-reaching effect. They are doing more than all the preaching in the world to counteract the propaganda of the quack and pseudo-medical man. They are establishing the doctor in the hearts of the people.

To return to our day's work: Dr. B. L. D., a member of the Visiting Sick Committee of the Academy, 'phoned to inform the Executive Office of the illness of Dr. H. M. Thereupon, a sick card was dispatched to Dr. H. M., the Doctors' Service Bureau was instructed to call his residence daily for reports, and his name was inserted among the Bulletin notes.

At 11:45 A. M., the Executive Secretary departed for the meeting of the Board of Trustees held over a luncheon table. At this meeting the Board attended to the various

details of approving bills, studying reports, reclassifying members, etc.

The question of syndicating the medical articles which have been appearing in the daily newspaper was discussed. It would be a relatively simple task, the trustees thought, to link up a few representative and more progressive County Medical Societies of the state and thus secure a state-wide syndication. As a corollary of this, a linking up of the more progressive societies in the country would do much to further the cause of a nation-wide syndication of popular medical articles. Greater medical instruction of the public would result from this business-like move.

A post graduate course of ten days, to be given in May by an internationally known authority, was also approved.

The Chairman of the Clinics Committee was called in to submit his report on conferences with the social service agencies of the city. This doctor stated that representatives of every clinic had been present at all discussions. Further, that an agreement had been formulated whereby the basis of admission to free medical clinics is a family budget computed in each case according to the income of the family and its minimum requirements as determined by a conservative standard budget worked out by the committees at these conferences. The Board of Trustees approved this report and plan, with the recommendation that the standard family budget be revised each year to meet changing conditions.

The last item taken up by the Board of Trustees was the matter of mal-practice suits resulting from charity cases. After a lengthy discussion, a special committee was appointed to get in touch with city officials and representatives of the City Community Chest with a view to placing before them the seriousness of this situation and the ultimatum that, unless the city or some philanthropic organization assumed the responsibility for the defense of such charity malpractice suits, members of the Academy of Medicine would refuse to donate further free service to the city. Another suggestion to aid in the elimination of mal-practice suits was made: That a council of seven, composed of two physicians, two dentists, two lawyers, and a Superior Court Judge, be appointed to pass on all mal-practice cases before they were brought to suit. If this plan were accepted by the Bar Association it would apply to perhaps eighty per cent of the lawyers of the country.

After the Trustees' meeting the Executive Secretary returned to his office at two o'clock P. M.

The afternoon mail brought a letter from a woman who desired a list of the best plastic surgeons in the United States. We get that often. Also letters from two members of the Ohio Legislature who pledged their support towards defeating a bill inimical to the good health of the public. These were in response to a resolution passed unanimously by the Academy members at the Annual Meeting. The mail also brought a letter from Milwaukee asking for information on the organization of a Physicians Service Bureau. Finally three members mailed in changes of address.

The stenographer was called in to take the minutes of the Trustees' meeting and answer the various letters just received.

At 2:45 P. M., Judge M. O. L., of the Municipal court dropped in the office to outline a case which had appeared before him that morning. A specialist had been called in for consultation on a case by the attending physician. This case was a birth injury in a newborn child. Later the patient's parent refused to pay the reasonable bill on the ground that she had not given explicit instructions to call in the consultant. The question was: Did the attending physician have implied authority to call in the consultant? Judge L. requested that the Academy of Medicine furnish him with a legal opinion or brief on this matter so that he could render a verdict which would be just and equitable to all parties. The Executive Secretary thanked the Judge for his consideration and after his departure pulled down Corpus Jurus for a little research work on this interesting question.

The Chairman of the Library Board dropped in at four o'clock to check over the list of journals to be bound. A discussion

ensued on the general situation and finances of the library for the current year.

At five o'clock the Director of Doctors' Service Bureau arrived at the Academy Building for the monthly meeting of the Service Bureau employees. At this gathering the director and assistants discussed the various problems that had arisen during the past month, and ways and means to improve the service were suggested. These meetings imbue the operators with a certain sense of responsibility and aid in keeping up their enthusiasm.

To treat the Doctors' Service Bureau more at length, this bureau has been running twenty-four hours per day since August 1, 1925. It was started with a campaign for members. We had approximately one hundred subscribers when we began operations. This had increased gradually to 150 (about fifty per cent of our active membership) and this is believed to be the saturation point. The subscribers are assessed $3.50 per month, payable quarterly, for this extra service. It is owned and controlled by the Academy, with the Board of Trustees acting as a Supervising Committee, but it is operated as a separate entity. The bureau is not incorporated but is classed as a department of the Academy which is incorporated but not for profit. Doctors' Service Bureau has its own employees (four) and its own system of bookkeeping. The bureau has nothing to do with the general funds of the Academy of Medicine. A constitutional proposal to make the bureau fees part of the annual dues of the Academy (thereby increasing the dues of senior active members from $35.00 to $55.00 per annum) was defeated at the last Annual Meeting. The majority of the members seemed to feel that this was an extra service and should be paid for exclusively by those doctors deriving the special benefits therefrom.

The main object of a physicians service bureau is to be a connecting link between the doctor and his patients. Most of our work consists in patients calling for their family physician or making appointments with a specialist, which is desirable business. We do get a share of emergency calls, but these are necessary evils. Often there is no remuneration to the doctor for such work. But such a bureau, being a quasi-public agency, must accept the good with the bad.

Physicians use verbal and printed advertisements to convey to their patients that they can be obtained at any time through the medium of the Doctors Service Bureau. They mail out dodgers with their monthly statements. In addition, we have every pay-telephone in the city covered by placards. Doctors have placards in their waiting rooms also.

Newspaper advertising has been tried but it is very costly and results are somewhat doubtful. One feels that it appeals to that element which we are trying to avoid. The doctor is the best medium of advertising, and he reaches the best people. However, newspaper advertising may be good at the time of inaugurating a service bureau just to put across the name and the telephone number. A new bureau should try to get a number which can be remembered easily by morons. They will be very good customers of your bureau. Main 1234 is ideal. We had to accept Main 2176, but attempted to popularize it with this tid-bit: "Are you 21? Do you remember the Spirit of '76? Then you should remember Main 2176."

Some doctors keep in touch with the bureau every few hours. Others are careless. Naturally the former receives better service as our operators are able to locate them very easily. We are blessed with a corps of loyal, enthusiastic assistants. Without constant enthusiasm on the part of the employees the Service Bureau would be lost. Each assistant must know every subscriber's idiosyncrasies and act accordingly.

Thirty of our subscribers have installed direct telephone extensions from their offices or residences (or both) to the Doctors Service Bureau offices. We have a special switchboard (called a stopboard by the telephone company) which combines our main trunk lines and these extensions. Every time the telephone rings in the doctor's office or residence we receive a light signal in our office. If the doctor fails to answer, we take the call and hold the message until the doctor returns. In this way no business is lost. It is a boon to the younger man who

cannot afford the expense of even an eight-hour office assistant, not to speak of twenty-four hour telephone coverage. The subscriber pays the telephone company a sum for this extension equal to the airial distance from his office or residence to our bureau office. Most of the men pay about five dollars per month to the telephone company. Others, living greater distances, pay more. I feel that we shall have sixty such extensions before the end of 1929.

We have our cards in the Toledo factories. When they have an accident they call us and we send the doctor who does the industrial work for that particular plant. We keep a list of industrial surgeons serving factories, as well as lists of all the doctors and specialists of the city. We have many inquiries for skin specialists, plastic surgeons and what not. We merely read the list of doctors to the inquirer and let him choose the physician to whom he wishes to go.

The operation of a Physicians Service Bureau brings with it loads of grief. Just try and please everybody. But it is worth all the trouble. Our bureau has pepped up our Academy and made it the center of medical activity of our city. It has helped to unify the doctors, which seems to be a problem in every large city. The advantages seem to outweigh by far the troubles. The people of Toledo come to the Academy of Medicine for all medical information, including opinions on quacks, and we feel that the bureau has been largely the cause of this advantage.

Our experience in Toledo has proved to us that a physicians service bureau should be owned and controlled by the doctors themselves and not by an outside agency. It is a case of the doctors running their own business, which is very important. Before a medical society begins to operate a bureau it should buy out or amalgamate with all medical service bureaus in the city. There should be no competition. If there are two or three agencies in existence, confusion on the part of the public and constant annoyance to the doctors will be the inevitable result. There should be but one bureau, under the control of the medical society.

Now to conclude. You have heard a few of the activities in which an Executive Secretary is engaged. Without a man responsible for these duties the bulk of this work must be borne by some member of your society. A physician has not the time to give from his practice to a thorough handling of it. Some things must be glossed over and slipped. Perhaps those things of most concern to you may be in this number. In any case, admitting the doctor's full capability, it is not just to saddle detail work of this kind on his shoulders. More than that, it will mean a failure to progress along the modern lines of education and service which you all desire. It becomes absolutely necessary to intrust such matters to one who can give them his whole time and undivided attention. Let the policy of the organization be dictated by the officers; the details of its execution can be handled by a full-time man. Such a manager is styled an Executive Secretary. I have been told that the Academies of Medicine throughout the country which are employing executive secretaries seem to be outstanding. I venture the prediction that every Academy of prominence will have an Executive Secretary in the very near future. The investment will pay rich returns financially and professionally.

I thank you very much. (Applause)

DISCUSSION

DR. RALPH P. SPROULE (Goldsmith Building). Your Board of Directors has gone into the problem of a Physicians Service Bureau with the establishment of a full-time secretaryship, and desires to present the following resolution:

RESOLVED, that the Medical Society of Milwaukee County empower its Directors to acquire and conduct a Physicians Service Bureau for the purpose of cooperating with the efforts of the members of this society in giving the best possible health service to the citizens of Milwaukee County, and generally to promote the efficiency of the Society.

The advisability of establishing our own Physicians Service Bureau was brought to the attention of the members of the Board of Directors of the Milwaukee County Medical Society. The Board of Directors delegated me to communicate with the secretaries of several of the County Medical Societies throughout the country with the idea of getting information.

The Toledo Academy of Medicine was the most responsive. Their system seemed to be the most typical and best developed of any with which I had corresponded. The Board of Directors deemed it advisable for me to go to Toledo and get first hand

information on the Toledo Academy of Medicine and Secretaryship. In March of this year I went to Toledo and spent a day with Mr. Burns and eight or ten doctors of Toledo. I came away from Toledo sold on the idea that the Milwaukee County Medical Society was a back number so far as activities for its welfare were concerned.

As you doubtless can understand from his outline, Mr. Burns is a busy man. His activities are varied. I am sure that having listened to his talk tonight you all feel we should have the same type of service here.

In Milwaukee we have the two alternatives, one to raise our dues, the other to get the money from some other source. We are able to establish our own Physicians Service Bureau and have a profit sufficient to carry a full-time secretaryship without the raising of our dues. That is our purpose in bringing this to your attention this evening. Your Board of Directors has studied this matter for some time and we feel that it is the thing to do.

At the dinner meeting of the past presidents of this Society preceding this meeting we were almost unanimous in the feeling that this was the proper move for us to take, and therefore we bring this to your attention tonight for general discussion.

DR. E. L, THARINGER (211 Wisconsin Avenue): It has been my misfortune to be secretary of this Society for a considerable number of years, and to be connected with another secretary's office previous to that time. At every election at which I was elected I felt as though the time had come when somebody was going to say something. I felt it should be time that this Society was getting hep to the fact that it needed another secretary. But evidently that never occurred, and it seems to me for that reason this organization is not aware of the shortcomings of the present way in which its business is being conducted.

I feel that this society is only half organized. While I have been satisfied to do my bit, and I have tried to do as much as could be done under the existing circumstances, I can see that with a little more time and a little more effort a good organization could be established here. It isn't a difficult matter, it is only a question of time. The opportunity presents itself every day. Now the time has come when we should reorganize, when we should solidify our organization so that it will be of more benefit to its members than it is today. That can readily be done by having a secretary, a full-time man who has the time to devote to detail. It is impossible for a doctor to so devote his time. Even an individual who is only half interested in this organization could increase its efficiency because, as I said before, the opportunities present themselves every day.

Necessarily, there would have to be an increase in the amount of the dues, and in the absence of any other solution I think it would be advisable to increase our dues materially. As you know, at the present time the County Society is receiving but two dollars per member. All of the activities of this society are being paid for out of this small amount per member, the remainder of the money going to the State Society. If we employed a full-time secretary we would have to increase the dues materially and I feel that it would not be out of the question to so increase them. Other organizations are paying higher dues. Ordinary organizations of mechanics are paying much more than is our medical society, for which, of course, they are getting an efficient service. But we can't expect anything for two dollars; that is perfectly obvious. You get just about what you pay for these days. Our organization could increase its strength if the dues were increased so that a full-time secretary could be employed.

This proposition of our own Physicians Service Bureau would be the means of increasing efficiency. A Physicians Service Bureau with a telephone exchange has contact with all the physicians belonging to that organization, and by the means of this contact information could be spread very rapidly throughout the city.

Just recently a proposition came up when we wanted to get the names of some forty doctors or so who might be willing to make night calls. The man who is running the present Physicians Service Bureau was in my office. He said, "I'll go out and get this list within an hour." Why can't we do that? We should not have to ask an outsider to do it for us? This same gentleman asked me, "Why don't you carry advertising in your bulletin?" I said, "We haven't got the means to go out and get advertising." He said, "Give it to me. I'll do it."

Now the Physicians Service Bureau is not the only thing. It is simply a means to an end. For instance, there is the possibility of increasing our membership through this Physicians Service Bureau. I feel certain that if I had the time I could go out and increase our membership very materially in a short time. One of the first things I would do would be to get to the senior class in the medical schools and canvass the hospitals. I am sure many would join our County Medical Society who are not now members. We could be of inestimable service to them because of this centralized office with the Physicians Service Bureau opened day and night, with someone in charge who would pay attention to details and see that their problems were brought before the society. In my opinion the advantages to be gained from such an arrangement would be very great indeed. Its possibilities are not limited.

Now the present Physicians Service Bureau was not organized, as many of you think, without medical assistance. The originator of this service is a man from out of town who came to see me at the time he wanted to establish this service. He knew nothing of the medical situation in Milwaukee. He came to me to find out the possibilities for such a service and I told him to go ahead. Many ethical

problems presented themselves, such as referring calls. This man was instructed by me as to the ethics of the proposition and he very soon learned how to handle the Physicians Service Bureau.

It was unfortunate that the originator of this service got into difficulties with the telephone company. He, being a private individual, could not establish credit relations and was compelled to pay in advance. I understand in this connection that the telephone company would be willing to cooperate with the medical society should we establish such an organization. But the original owner soon had to give up the business. He did not live in the city but came here at intervals of four weeks, although he conducted the bureau quite successfully in that manner. So it appears that there would be no great difficulty in that connection. The man who has the service now bought it from the first owner. He came to me also and for a time I had perhaps a telephone call a day with regard to certain workings of the institution and certain ethical questions.

This Physicians Service Bureau has the entire confidence of the public at the present time. Even the Police Department and the Fire Department call on it when they need service. The owner is a layman but he renders a very efficient service and there has been no criticism of his service.

Many things will come up. There appeared in the Milwaukee Journal a number of editorials with regard to this recent question of the Fire Department squad. You probably have all read those editorials. Those editorials should be answered. I have heard many physicians say that if the doctors presented their side of the case it would be an entirely different story. Now a full-time secretary could present the doctors' side of the case and could obtain data necessary to present their case. The American Medical Association has an enormous fund of knowledge available but your present secretary hasn't the time to carry on correspondence regarding these different matters. A full-time secretary could do that. Then the question is brought up as to the handling of such a bureau, that is, whether or not doctors could successfully handle such a proposition. I see no reason why the doctors cannot do so. Then there is the question of cliquery and politics in a society. I think we have gotten over that point. We have now a Board of Directors consisting of five men. The turnover in this group is very slow and there isn't the possibility of voting in the control of this society in the course of a year or two. These men are all high class men, and in considering this question we have met once a week, since Dr. Gramling was elected president, to discuss this question. So the word of the Directors or some other group in the society could have control over the full-time secretary who could manage such a proposition, and in the management of it he could be under the direction of a certain group. It is true that there may be personal disagreements but there always will be such things. I feel that is our own fault. However, a full-time secretary could clear up a lot of those matters. There are difficulties and squabbles in all activities, but that is no reason that we, as doctors, could not get together and settle those differences as others do. (Applause)

DR. LOUIS F. JERMAIN (1701 Wisconsin Avenue): Toledo is a city about half the size of Milwaukee, with a County Medical Society about half our size. Let us ask ourselves the question, "What have we been doing for the benefit of the public? What have we, as members of the County Medical Society, been doing for the benefit of the medical profession?

To me it seems entirely a matter of organization. Our organization is good at the present time. I think with our Board of Directors in control the society will agree that we have a splendid organization. But what we need is a worker. You can't expect your President of the County Medical Society to do this work. You can't expect your Secretary, under present conditions, to do this work. The crux of the whole situation seems to me, to be that we must have a full-time executive secretary, a man who is on the job all the time and who will be able to carry through all this work, perhaps not all the things which were mentioned by the gentleman here but many of them.

The idea of having an executive secretary for a society isn't an experiment at all any more. We know what our State Medical Society is doing and has done under the direction of an executive secretary. This society has a membership equal to one-third of the entire membership of the State Medical Society and ought to have an executive secretary who does this work for the society. That executive secretary's office should be the central depot for information, not only for the medical profession but for the citizens of the city of Milwaukee. If you had an office with an executive secretary it wouldn't be long before people would be telephoning your Physicians Service Bureau. They wouldn't telephone the Fire Department or the Police Department but would call the Executive Secretary of the County Medical Society.

Now how are we going to do this? It is said there are two ways of doing it, either by increasing the dues of the Society or by establishing this Physicians Service Bureau and financing the executive secretary's office in that way.

I want to say that I am heartily in favor of establishing this Physicians Service Bureau. If there is a Physicians Service Bureau in Milwaukee it ought to be under the direction of the County Medical Society for that is where it belongs. We would be giving great service to the public and would be helping these young men who want to go out to make calls at night and give them an opportunity to get this work.

I thank you. (Applause)

DR. S. J. SEEGER (120 E. Wisconsin Avenue): I have been very much interested in this matter and I wish to give it my wholehearted endorsement. I

think that the taking over of this Physicians Service Bureau represents an opportunity for this Society which we should not allow to slip by.

The gentleman who conducts the present Physicians Service Bureau has the confidence of the public and has rendered good service. I think it will interest you to know that this has not been the experience of physicians with privately conducted service bureaus throughout the country. While the present owner of this service may be satisfactory, we do not know when he will decide to sell this business, which is profitable, to whom he will sell it, or when something may happen to him which would necessitate his giving it up, nor do we know who will succeed him as its manager. I feel that if you cannot trust and rely upon your Board of Directors to conduct a bureau of this kind without politics and without favoritism, that it is rather illogical to rely upon some individual whom you have never seen and do not know.

I think that the opportunities for the service of a part or full-time secretary are without limit. The social conditions of medicine are changing and changing rapidly. While the skeleton of our organization is good, we need someone who is constantly on the alert to protect our interests. That, it seems to me, was well demonstrated in the recent discussion regarding the rescue squads. I feel that we would not have been treated so badly either by the public officials or by the newspapers if our organization had been more efficient. I have been Chairman of the Press Committee of this society for several years and I know first hand that it is impossible to get real cooperation from the newspapers in Milwaukee. However, I feel that someone who represented the Society in a full-time capacity and who had the necessary authority would very soon bring about a relationship with the press which would be very much to our advantage.

Someone mentioned the efficient work which had been done by our State Medical Society and mentioned Mr. Crownhart as an instance of what can be done when an individual gives his entire time to such a project. I might say that while the State Medical Society has done very commendable work in its field, many feel that the society at Madison cannot give sufficient time to the purely local problems of this city. While we represent one-third of the profession of the state, I think our problems are quite different from those of the rest of the State Medical Society. Many of them are big problems and I feel they should be properly taken care of. As a first step I suggest taking over this bureau. (Applause)

DR. RUDOLPH HOERMANN (208 Third Street): I would like to ask the Secretary what the attitude of the present owner of the Physicians Service Bureau is. Would there be any turnover on the 225 subscribers which he has? This man has given us very excellent service. He has gone out of his way to see that we got the contact we wanted. I think it is only fair to see that this man gets a square deal so far as his business that he has established is concerned.

DR. JOSEPH LETTENBERGER (123 Wisconsin Avenue): I would like to hear the Commissioner of Health tell us of his experience.

DR. JOHN P. KOEHLER (Commissioner of Health): Mr. President and Members of the County Medical Society: I really feel that the greater number of the questions involved concern the private practitioner more than the health officers. However, I want to assure you that so far as I am concerned, as Health Commissioner, I shall be pleased to have the opportunity to cooperate with you in every way possible.

I want to say that some of the activities mentioned by Mr. Burns are to some extent taken care of at present by the Health Department, but I always feel they can be better taken care of by the medical profession. I mean such a service as the giving of lists to people who come in and want to know what men we consider good for orthopedic service, eye, ear, nose and throat, etc. We would be glad to discontinue this service if we could, as that is a service you could take better care of than we can.

When it comes to educational work through the newspapers or over the radio, I think you can render a distinct public health service to the community, and I feel that you would also be of great assistance to the Department in carrying on other educational programs. It is not always easy for those in the Health Department to find the time to write special medical articles. We have our own health bulletins and should contribute more to the Wisconsin Medical Journal but we haven't the time for that sort of work. I think the Milwaukee County Medical Society has depended, locally at least, too much on the Health Department for educational work. An educational bureau would be welcomed by us.

Of course I want to say here that as far as we are concerned we are interested in anything which will give the public good service. I am not saying this for political purposes. I am simply saying this because I am absolutely sincere in the belief that the public should be given first consideration. If you do that you will find that the medical profession will never suffer. The program you are considering now, I think, is a program of improved service to the public, especially when it comes to emergency service. If people can call up the bureau and get a doctor at any time during the day or night they will be getting a much needed service. I will admit that since our present physicians' service bureau has functioned we do not receive as many calls as we used to, but even now I get an occasional call in the middle of the night. If you had a Service Bureau I would be glad to refer all such calls to it.

I will agree with most of you that a good many people are at fault when they are unable to get a doctor. The fact remains, however, that there are worthy patients that cannot always get a doctor

and until you can prove to them that they can, you are going to be on the defensive.

I was surprised to hear some members say that they felt they were unjustly dealt with by the newspapers in the recent controversy relative to emergency service. Probably I did miss some of the newspaper articles, but I was under the impression that the newspapers did try to convey to the public that the Fire Department was limited in its ability to render service and certainly ought to have its service supplemented by the medical profession. I think the worst article I read was to the effect that as long as the medical profession was not able to offer this emergency service it could not complain if the Fire Department offered such a service. I have spoken to the Chief of the Fire Department and he feels that as long as his men are called they must answer the call and do the best they can. But he is perfectly willing to get rid of these calls if the medical profession can assume responsibility for such calls, and I believe you will find that the newspapers will be ready to cooperate with you if you have any program that will make it possible for the public to obtain medical service in case of emergency. I think you will all admit that although the newspapers have given much publicity to resuscitation work of the Fire Department in the past, they have refrained considerably during the last few weeks. I think you will have to give some credit to the newspapers for this spirit of cooperation.

As to the service which I have in mind, I believe that the kind of service we ought to work for is that which will make it possible for every person to get a doctor within a reasonable length of time; not necessarily an emergency service but a service that can be gotten within a reasonable length of time. When it comes to an emergency where people are panicky and simply must have a doctor at once, I don't believe your Service Bureau will be able to take care of that sort of service. Men who return home late at night and must start out again at an early hour in the morning should not be expected to render emergency service. I believe that other plans must be made and I think that this can be taken care of by ambulances in charge of doctors and equipped with oxygen tanks, pulmotors, etc., but the service that is not so urgent you certainly can handle.

I want to say again that I endorse the sentiments expressed here this evening and I for one certainly will be glad to see this service put into effect. (Applause)

DR. J. P. McMAHON (Wells Building): I was just about to ask Mr. Burns whether the Toledo Academy employs the radio in its efforts to further the education of the laity.

Now, gentlemen, as the one charged with the duties and responsibilities of the Chairmanship of your Committee on Public Policy and Legislation for the period from 1909 to 1918, during which time practically all questions except those concerning the routine duties of the President, Secretary and Treasurer were referred to that committee, I endorse this movement in toto. I desire at the same time to state that the only criticism I have to offer is that it is being present just about ten years later than it should have been.

Medico-sociologic and medico-legal questions of interest to the profession and to the laity have always naturally appeared periodically and they will continue to so appear. These questions frequently require considerable time and energy in order to assemble all the facts necessary to reach deliberate and conclusive decisions. The outstanding difficulty has been that the succeeding Presidents, Secretaries and Chairmen of the different standing committees have not been able to devote sufficient time to investigate the questions which have arisen to the extent necessary to reach conclusions sufficiently promptly to be able to place them at the disposal of the press at a time when the press could, or at least would, consider the conclusions as news. As a result of this fact the press has followed a policy of securing precipitate opinions and snap judgments from different members of the profession, which opinions were not infrequently in conflict.

The employment of a full-time secretary should obviate this difficulty and in addition enable the Society to initiate and carry out many movements in the interest of both the profession and the laity, which under our present organization has been impossible.

With respect to Doctor Seeger's remarks, and lest members depart laboring under misapprehensions with reference to the disposition of the press, I desire to improve the opportunity to make a statement. As most of you are aware, I have, during the last number of years, been putting forth some humble effort to bring about an earlier diagnosis of cancer by the dual means of attempting to impress upon the members of the profession the early diagnostic symptoms and acquainting the laity with the early suggestive symptoms. This attempt made it necessary for me, as a representative of this Society, to advise with the representatives of the local press, more particularly the city editors and those in charge of the broadcasting facilities of the Milwaukee Journal and the Milwaukee Sentinel. It affords me pleasure to state that the press representatives were always sympathetic and cheerfully placed their facilities at our disposal, not only so far as enabling us to spread the gospel of the early suggestive symptoms of cancer is concerned, but also to help us to educate the laity on other subjects, such as prenatal care, the prevention of blindness, infant welfare, mental hygiene, communicable diseases, industrial diseases and accidents, etc., etc. The Milwaukee Journal, which has one of the most costly and best broadcasting stations in the country, unstintingly placed its radio service at our disposal.

This fact was reported back to your Board of Directors with the suggestion that I would under-

take to prepare and deliver short talks on the early suggestive symptoms of cancer, and with the request that they make arrangements to have other members of the Society prepare and deliver short talks on the many other medical problems, the solution of which requires a more extensive knowledge on the part of the laity. The opportunity, however, was not taken advantage of, probably principally because of lack of time on the part of the President, Secretary and Chairmen of the different committees to assign the subjects and arrange for the delivery of the talks.

I am convinced that the radio and motion pictures, are the most effective means of educating the laity and that information released over the radio will reach many more people in the future than short articles printed in newspapers. A full-time secretary is undoubtedly a sine qua non to the carrying on of this and other means designed to enable the laity to preserve their health and prolong their lives. For these and other reasons I again endorse the plan presented tonight.

The refinements of the technique which may be employed in the carrying out of the plan are not entirely clear to me but I feel confident that this may very well be left to the judgment of our Directors.

Owing to the amount of discussion which has taken place since Doctor Sproule presented his report and accompanying motion, and owing to the fact that a number of members entered the meeting after the presentation, I suggest that it may be well to have the motion reread. (Applause)

DR. EUGENE SMITH (445 Milwaukee Street): I have a question to ask Mr. Burns. I would like to know whether a bureau in a city this size, providing doctors who would cooperate jointly, could carry an executive secretary. I think everybody in the County Medical Society feels that out of the thirteen dollars we subscribe to county and state work, two dollars is very little proportionately. While we don't want to handicap state work, our cut seems rather small.

I also have a question for Doctor Koehler. Having spent a great many years in emergency practice, I have run across (not lately, to be sure) police squads and pulmotor squads, and what I have seen them do is perfectly terrible. I can't see in some instances how the human frame stood up. I have wondered sometimes what chance a man, who was apparently dead, had of getting anything out of their treatment except a sure pass one way or the other. I really don't know, and at the same time I wish to be perfectly just to these men. Angels, you know, can only do their best, and you will perhaps recall the line, "Fireman, save my child." There must have been some reason for writing that. These men are certainly a loyal bunch of fellows even though they sit around in their chairs when they are not playing pinochle.

I would like to have Doctor Koehler tell us how this squad is educated in the use of this apparatus. Certainly the city must tell them how to use this stuff. Possibly some of you are as ignorant as I am. Is this squad's activities being passed upon by the Health Department? If not, why does the County Medical Society not take a hand and see that this service is administered properly?

Now as to the educational part of this thing, I am spending from two to four hours a day at the Academy of Medicine. It is a most interesting place. Some of the best thought of the past and present is right there staring you in the face. Readers are coming in more and more to get information. These readers, during the past few years, have often been lay readers. This department is open to the public and that little work done there has brought in a prodigious number of people who want to know what can be done. I have instructed the secretary to connect me if I am at the office or to introduce me while I am there. It is really surprising to notice the thirst for medical knowledge that these people have.

You know doctors, according to Mr. Burns' statement, have a phraseology all their own, sometimes used to conceal thoughts, sometimes ignorance. That is what keeps so many of them poor. Now if there was an educational bureau which could talk to these people through the papers, the radio, or at the County Society's office, I feel sure that it would help a great deal. I know that you have a lot of very worth while things to take care of, and I am sure the executive secretary would have a heavy mail which would grow heavier in a short while. I feel certain from my experience over there that a lot of people in this town want information. I believe there are more here than anywhere else in the world. "See your doctor first" is a very good answer, but you have to give them a little steering as to whether they are in trouble or not, and that sort of thing.

This has been a most pleasant and uplifting meeting to me. I am very anxious to see this whole matter go through and to see some central bureau of information and help established.

Doctor Seeger said something with regard to bulletins. I believe something of this sort is being done at Madison, and I think the idea a good one. I would suggest that we put on the back page all the theatre dates and make it complete so that any doctor might see what he had to do and want to do it. (Applause)

PRESIDENT GRAMLING: We would like to hear from some of the younger members.

DR. R. J. DALTON (120 East Wisconsin Avenue): It has been a most interesting evening for me.

Most of my work is in the obstetrical field although I do other work in addition, and at times handle some emergency cases. I have had several experiences similar to Doctor Smith's. One instance in particular comes to my mind, that of a new-born baby which was suffering from convulsions. I never did know what happened to the

baby because the Fire Department arrived ahead of me, and I didn't know whether the men knew what they were doing or not as I personally didn't know whether they were doing the right or wrong thing. I believe many medical men are in the same position. They are ignorant of the scientific use of the pulmotor, as no doubt its use differs in different individuals at different ages, suffering from different conditions.

DR. S. M. MOLLINGER (396 Eleventh Avenue): I don't know that I can add anything more to what the other gentlemen have said. I think this proposition should be given some consideration this evening, and if not this evening in the fall of the year when we will have a meeting starting at that time.

DR. J. S. CURTIN (2664 Fond du Lac Avenue): With regard to the question of the Physicians Service Bureau being taken over by the County Medical Society, I think you should send cards out to the various men and get their opinions on it.

DR. GEORGE H. DICKINSON (713 Oakland Avenue): Being almost a charter member of the Physicians Service Bureau, I would like to say that my contact with that organization has been a very pleasant one. It is a service I would very much dislike to go without. When the time comes for the County Medical Society to establish their own service bureau I believe conditions can be brought about in such a way as to work no hardship to the service we now have.

DR. R. G. SAYLE (123 Wisconsin Avenue): Did you say the young fellows?

The idea, when first presented to me, met with my approval, and as I hear the discussion on the subject I feel that it should be given a trial. I can see we shall have some things to contend with but you get nothing without effort, and so far as some of the criticism is concerned of those who take the place of the legitimate physicians, the fireman, I think many of those things that we perhaps look askant upon are of our own begetting. We first have to be efficient ourselves. This proposition, if carried out, certainly will make for our better efficiency and we will be able to dispense with the other method. Our bureau can have an ambulance of its own; it can be in touch with all emergency work, and it ought to be possible in this city to not criticise the honest efforts of the Police or Fire Departments in emergency work. Let us remedy the situation so that those men will not be asked or required to assume responsibility for which they are not fitted.

DR. SPROULE: I will read the resolution again.

. . . Dr. Sproule reread the resolution. . . .

Mr. Burns, I want you to know, is a lawyer, having been admitted to the bar in Ohio.

The Toledo Physicians Service Bureau, as you will have noted if you listened carefully, is operated for less than five dollars, one of the reasons being that the telephone company charges for the listing in the telephone directory, and that charge to know whether a bureau in a city this size, providing doctors who would cooperate jointly, could is billed directly to the individual, whereas in our own physicians bureau the gentleman in charge bills the doctor and then pays it to the telephone company.

You have noted that Mr. Burns is Secretary of the Toledo Academy of Medicine. The Toledo Academy of Medicine, until this year, was the Toledo and Lucas Counties Academy of Medicine. It is the old Toledo Academy of Medicine, similar to our society here, combined with the Toledo County Medical Society, and since then they have assumed the new name.

The motion stands as originally read.

It is moved that the Medical Society of Milwaukee County empower its Directors to acquire and create and conduct a Physicians Service Bureau for the purpose of cooperating with the efforts of the members of the Society in giving the best possible health service to the citizens of Milwaukee County, and generally to promote the efficiency of the Society.

PRESIDENT GRAMLING: The Board of Directors will first take up the matter with the present Physicians Service Bureau to see if it cannot be acquired for a reasonable amount of money. That will be the first question on which we should decide. You have the question. All those in favor will please say "aye." It is unanimously adopted.

. . . Motion carried. . . .

DR. STEPHEN CAHANA (114 Wisconsin Avenue): I make the motion that we give a vote of thanks to Mr. Burns.

PRESIDENT GRAMLING: Has anyone a question to ask? If not, we will adjourn.

. . . The meeting adjourned at ten-fifteen o'clock P. M. . . .

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(Continued on page 508)

THE JOURNAL BOOK SHELF

Edema and Its Treatment. By Herman Elwyn, M. D., Assistant Visiting Physician, Gouverneur Hospital, New York. Cloth $2.50. The Macmillan Co., New York, 1929.

An Introduction to The Study of Physics (Now for the first time published) by William Heberden (1710–1801) with a Prefatory Essay by LeRoy Crummer, with a reprint of Heberden's "Some Account of a Disorder of the Breast." Portrait in photogravure. Six illustrations. Price $2.00 net. Paul B. Hoeber Inc., New York, 1929.

The Conquest of Cancer by Radium and Other Methods. By Daniel Thomas Quigley, M. D., instructor in surgery in the University of Nebraska College of Medicine; director of the Radium Hospital of Omaha. Illustrated with 334 engravings. Price $6.00 net. F. A. Davis Co., Philadelphia, 1929.

Youthful Old Age. How to Keep Young. By Walter M. Gallichan. With an introduction by Thurman B. Rice, M. D., Indiana University School of Medicine. Price $2.50. The Macmillan Company, New York, 1929.

Osteomyelitis and Compound Fractures. By H. Winnett Orr, M. D., chief surgeon of the Nebraska Orthopedic Hospital, Orthopedic Surgeon Lincoln General Hospital, Consulting Orthopedic Surgeon Bryan Memorial Hospital, Lincoln, Nebraska. Cloth $5.00. C. V. Mosby Company, St. Louis, 1929.

Principles and Practice of Electrocardiography. By Carl J. Wiggers, M. D., professor of physiology in the School of Medicine of Western Reserve University, Cleveland, Ohio. With 61 illustrations. Price $7.50. C. V. Mosby Company, St. Louis, 1929.

Gonorrhea and Kindred Affections. Gonorrhea in the Male, Chancroid and Verruca Acuminata by George Robertson Livermore, M. D., professor of urology, Medical Dept., University of Tenn., and Gonorrhea in the Female and Infectious Granulomata by Edward Armin Schumann, M. D., associate professor of obstetrics, University of Pennsylvania. Price $5.00. D. Appleton and Company, New York and London, 1929.

The History of Hemostasis. By Samuel Clark Harvey, M. D., professor of surgery, Yale University; surgeon in chief, New Haven Hospital. With 19 illustrations. Price $1.50 net. Paul B. Hoeber, New York, 1929.

BOOKS RECEIVED FOR REVIEW

The Common Head Cold and Its Complications. By Walter A. Wells, M. D., professor of Oto-Laryngology, Georgetown University, Washington, D. C. With an introduction by Hugh S. Cumming, M. D., surgeon general, United States Public Health Service. Price $2.75. The Macmillan Company, 60 Fifth Ave., New York City.

Outline of Preventive Medicine. For medical practitioners and students. Prepared under the auspices of the Committee on Public Health Relations New York Academy of Medicine; 21 contributions. Editorial Committee: Frederic E. Sondern, Chas. Gordon Heyd, E. H. L. Corwin. Price $5.00. Paul B. Hoeber, Inc., New York City.

Varicose Veins. With special reference to the injection treatment. By H. O. McPheeters, M. D., director of the Varicose Vein and Ulcer Clinic, Minneapolis General Hospital, associate staff of Northwestern Hospital, Minneapolis, Minn. Illustrated with half-tone and line engravings. Price $3.50 net. F. A. Davis Company, Philadelphia.

Sterilization for Human Betterment. By E. S. Gosney and Paul Popenoe. A summary of results of 6,000 operations in California, 1909–1929. Price $2.00. The Macmillan Company, 60 Fifth Ave., New York City.

Gynecologic Technic. By Thomas H. Cherry, M. D., professor of Gynecology, New York Post Graduate Medical School and Hospital. With 558 half-tone and line engravings, from photographs and pen and ink drawings by the author. Price $8.00 net. F. A. Davis Company, Philadelphia.

Applied Electrocardiography. By A. E. Parsonnet, M. D., attending physician and cardiologist, Beth Israel Hospital, Newark, N. J.; and A. S. Hyman, M. D., associate physician and cardiologist-in-chief, Beth David Hospital, New York. With 102 illustrations. The Macmillan Company, 60 Fifth Ave., New York City.

A Study of Masturbation and The Psychosexual Life. By John F. W. Meagher, M. D., neurologist to St. Mary's Hospital, Brooklyn. Second edition. Price $2.00. William Wood & Company, New York City.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Secretary, Mr. J. G. Crownhart, 119 E. Washington Ave., Madison, Wisconsin. These new books will be loaned for an inspection period only.

Medical Life, August 1929. Translation on the work of Nicolaas Tulp by Dr. Adrian Scolten, Madison, Wisconsin. Doktor Nicolaas Tulp (1593–1674) is only a shadow in medical history, but thousands who never saw a portrait of Boerhaave, and never looked upon the likeness of Leewenhoek, are not only familiar with the features of the anatomist of Amsterdam, but could describe the clothes he wore in 1632. For in that year, the brush of the youthful Rembrandt which immortalized his friend in "The Anatomy Lesson", served to make Tulpius an artistic, rather than a scientific, figure. We gaze with such interest at Nicolaas Tulp's tassels and his exquisite lace collar, that even when we admire Rembrandt's fore-shortened corpse, we forget that the author of that dissection was the first to describe the beri-beri and that the ileocecal valve is still known

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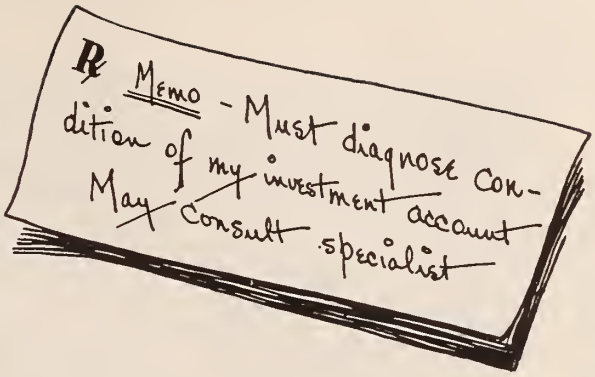

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as Tulp's valve. Much has been written about the famous Dutch physicians of the seventeenth century, but Tulpius remains a picture.

Various editions of Tulp's *Observationes Medicae* are in the Library of the Surgeon-General's Office, but the work has remained untranslated into English up to the present time. Recently, Adrian Scolten has Englished a rare book by Thyssen on the Life and Writing of Nicolaas Tulp. The translation of Tulp's language was a difficult piece of work, for the Holland Dutch of 1650 is as much like the Holland Dutch of today as Chaucer's English is like contemporary English.

We learn that: Tulp performed postmortems to check up on his diagnosis; made public dissections on the human body (provided there was a hanging); conducted clinics in operative surgery; used drainage tubes fashioned after "beer faucets"; cured Rembrandt by suggestion of a disease in which Rembrandt imagined his bones were like jelly; described rare animals in a manner that Huxley thought noteworthy; removed an unknown worm from the intestine, made a drawing of it, and had it "cut into copper"; noted pulsation in the spleen; was also the first to discuss the significance of the "cauda equina"; saw the need of, and therefore promoted, the first Dutch Pharmacopeia.

This Tulpius Number of Medical Life demonstrates that Tulpius was a sagacious physician—though his Hippocratic aspects were adulterated with a generous admixture of Pliny; that Thyssen is a wise commentator; and Adrian Scolten an excellent translator. We sincerely trust that in the near future the entire translation will appear in book form.

Surgical Pathology. By William Boyd, M. D., professor of pathology, University of Manitoba, Winnipeg, Canada. Second edition, revised and reset. Octavo of 933 pages, with 474 illustrations and 15 colored plates. Cloth $11.00 net. W. B. Saunders Company, Philadelphia and London.

The reviewer is one of those who find it difficult to separate the pathology of surgical lesions from pathology in its widest sense. Nevertheless, this volume has very successfully embraced a review and discussion of those conditions of particular importance to the surgeon. It is necessarily limited in scope, so that for more complete knowledge of any one lesion the surgeon or pathologist must necessarily consult other literature. The author's preface makes plain his point of view, namely, to present pathology in a most useful manner to the surgeon, and in that he succeeds very admirably. One might have wished that more space had been devoted to descriptions of the gross lesion, but one must realize that no one can learn gross pathology from a book, and the surgeon can best learn that from carefully observing the tissues and following them through to the laboratory, and comparing the gross picture with the microscopic lesion. It is a regrettable fact that few surgeons are to be found in the surgical pathology laboratories. Too few of them appreciate the value of the microscope, and they have relegated this most important source of information to the pathologist. A surgeon whose pathological information is secondhand can never be a first-rate surgeon. The book is well illustrated, many of the illustrations having been taken from monographs and other standard works. This is a book to be recommended to young surgeons in the hopes that they will not neglect the most important aspect of their training. It is to be recommended to older surgeons because it is easy to read and will serve to enlighten them on many modern opinions. It is useful to young pathologists and students of pathology, but these latter will demand works of more detailed information. N. E.

The Collected Papers of the Mayo Clinic and the Mayo Foundation for 1928, Volume XX. Edited by Mrs. M. H. Mellish, Richard M. Hewitt, M. D., and Mildred A. Felker, B. S. Octavo volume of 1197 pages with 288 illustrations. Philadelphia and London: W. B. Saunders Company, 1929. Cloth, $13.00 Net.

This volume consists of 429 papers or references to them which have been produced in the year by members of the staff of the Mayo Clinic and the Mayo Foundation. There are many papers dealing with diseases of the various systems of the body.

The numerous articles on the physiology of the liver and surgery of the gastrointestinal tract are among the important contributions of this volume. Lumbar ganglionectomy and ramisectomy for congenital idiopathic dilatation of the colon are described and results reported. There are many articles dealing with the thyroid, pancreas, and spleen, and as usual are excellently written. This volume is well illustrated; as is characteristic of the Mayo Clinic Publications. F. D. M.

Clinical Aspects of Venous Pressure. By J. A. E. Eyster, B. Sc., M.D., Prof. of Physiology, University of Wisconsin; Associate Physician, Wisconsin General Hospital. Cloth, 8vo., 135pp., Macmillan Company, Chicago, $2.50.

The author has collected all the information in regard to Venous Pressure into a small volume which is very readable. Dr. Eyster for years has been much interested in Venous Pressure and has expressed himself in numerous articles of the opinion that it is a much neglected clinical method. He takes up the history of Venous Pressure, the application of it, discusses the mechanism of the circulation and gives a few illustrative cases. A very comprehensive bibliography completes the volume. This is a very interesting and worth-while contribution to this most important subject.

L. M. W.

DRIVE THEM OUT

(Continued from page 505)

Although the public knows that the quack does these very things, because of its gullibility it continues to do its best to assist him through cloaking

The Mounds Park Sanitarium

FOR more than a quarter of a century Mounds Park Sanitarium has co-operated with physicians of the Northwest in offering all the recognized essentials in the care of nervous and mental patients.

The Sanitarium is a general hospital with a complete staff of consulting physicians and surgeons, as well as a complete staff of neuro-psychiatric specialists.

A staff of nurses specially trained in the care of mental nervous patients is likewise maintained. A complete department of occupational therapy has recently been added. Other such recognized features are provided.

The sanitarium maintains an atmosphere of cheerfulness, and located as it is adjacent to the beautiful Indian Mounds Park, provides every advantage for convalescents.

Saint Paul, Minnesota

Earl and Indian Mounds

his nostrums or methods with secrecy and otherwise providing a shield that is hard for those who would reveal him in his true colors to break down.

Wisconsin, through its state board of medical examiners, will engage in a more strenuous campaign against quacks. It should persist until the state is entirely rid of any savor of that type and erect such barriers as will best prevent the invasions of others of the same ilk.

The governor has just signed a bill appropriating five thousand dollars for use of the state board in the prosecution of such quacks. That is not very much money considering the size of the undertaking ahead nor the worthiness of the project, but at least it should help some. Fond du Lac Reporter, July 2, 1929.

Therapeutic Notes

New and Nonofficial Remedies

In addition to the articles enumerated previously the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories:

Abbott's Viosterol Cod Liver Oil.

Ciba Co., Inc.

Atoquinol-Ciba

Vioform-Ciba

Eli Lilly & Co.:

Inhalant Ephedrine (Plain)-Lilly.

Hypodermic Tablets Ephedrine Hydrochloride-Lilly, 0.016 Gm. (¼ grain).

Hypodermic Tablets Ephedrine Hydrochloride-Lilly, 0.0325 Gm. (½ grain).

Hypodermic Tablets Ephedrine Sulphate-Lilly, 0.016 Gm. (¼ grain).

Hypodermic Tablets Ephedrine Sulphate-Lilly, 0.0325 Gm. (½ grain).

Lilly's Ephedrine Jelly.

Ointment Ephedrine Compound.

Syrup No. 110 Ephedrine Sulphate.

Syrup No. 111 Ephedrine Sulphate.

Mead Johnson & Co.:

Mead's Powdered Lactic Acid Milk, Non-Curdling No. 1 with Dextrose.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Inhalant Ephedrine (Plain)-Lilly.—A solution containing ephedrine-Lilly (New and Nonofficial Remedies, 1929, p. 166) 1 Gm.; cottonseed oil, 1 Gm.; perfumed and tinted, liquid petrolatum to make 100 cc. Eli Lilly & Co., Indianapolis.

Hypodermic Tablets Ephedrine Hydrochloride-Lilly, 0.016 Gm. (¼ grain).—Each tablet contains ephedrine hydrochloride-Lilly (New and Nonofficial Remedies, 1929, p. 168), 0.016 Gm. Eli Lilly & Co., Indianapolis.

Hypodermic Tablets Ephedrine Hydrochloride-Lilly, 0.0325 Gm. (½ grain).—Each tablet contains ephedrine hytrochloride-Lilly (New and Nonofficial Remedies, 1929, p. 168), 0.0325 Gm. Eli Lilly & Co., Indianapolis.

Hypodermic Tablets Ephedrine Sulphate-Lilly, 0.016 Gm. (¼ grain). Each tablet contains ephedrine sulphate-Lilly (New and Nonofficial Remedies, 1929, p. 169), 0.016 Gm. Eli Lilly & Co., Indianapolis.

Hypodermic Tablets Ephedrine Sulphate-Lilly, 0.0325 Gm. (½ grain).—Each tablet contains ephedrine sulphate-Lilly (New and Nonofficial Remedies, 1929, p. 169), 0.0325 Gm. Eli Lilly & Co., Indianapolis.

Syrup No. 110 Ephedrine Sulphate.—It contains ephedrine sulphate-Lilly (New and Nonofficial Remedies, 1929, p. 169), 0.22 Gm., in 100 cc. (1 grain per fluidounce) and alcohol 12 per cent; flavored and tinted. Eli Lilly & Co., Indianapolis.

Syrup No. 111 Ephedrine Sulphate.—It contains ephedrine sulphate-Lilly (New and Nonofficial Remedies, 1929, p. 169), 0.44 Gm., in 100 cc. (2 grains per fluidounce), alcohol, 12 per cent; flavored and tinted. Eli Lilly & Co., Indianapolis.

Neocinchophen-B. P. C.—A brand of neocinchophen-N. N. R. For a discussion of the actions, uses and dosage, see New and Nonofficial Remedies, 1929, p. 114. Benzol Products Co., Newark, N. J. (Jour. A. M. A., August 17, 1929, p. 524)

Viosterol.—Investigators discovered that ergosterol when subjected to ultraviolet radiation, develops an antirachitic (vitamin D) potency enormously greater than that of cod liver oil. For therapeutic use the ergosterol after irradiation is usually dissolved in a vegetable oil. The Council on Pharmacy and Chemistry has adopted the term viosterol to designate irradiated ergosterol, and viosterol in oil to designate a preparation containing this substance dissolved in oil. The Council has also provisionally adopted the qualifying phrases 100 D, 5 D, etc., to designate the vitamin D potency of the various preparations as multiples of the vitamin D potency of good cod liver oil. Viosterol is for use in prophylaxis and treatment of rickets and, experimentally, in other conditions arising from faulty calcium and phosphorus assimilation. It should be borne in mind that viosterol does not contain vitamin A and that harm from hypercalcemia may result from the use of too large doses.

Viosterol in Oil 100 D.—Viosterol dissolved in a vegetable oil and standarized to contain 1,333 rat units of vitamin D in each Gm., this strength being 100 times that of a potent cod liver oil used as a standard. The daily prophylactic dose for the average infant and child is 8 to 10 drops (0.1233 to 0.1666 cc. : 2⅔ to 3⅓ minims). The marketed preparations are accompanied by a dropper designed to deliver 3 drops to the minim.

The Wisconsin Medical Journal

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An Experiment in Measles Control

By JOHN P. KOEHLER, M. D.,
Commissioner of Health, Milwaukee

During the first six months of 1929 there were 12,949 cases of measles reported to the Milwaukee Health Department. The epidemic reached its height on May 17th when there were 2,230 cases on hand. As usual, most of the cases were among the preschool age children and children in the kindergarten and lower grades.

When measles becomes epidemic in a school, very few susceptibles escape. Many parents appealed to the Health Department to close the schools. Not feeling justified in closing the schools, the Health Department decided to try out a procedure that would make it possible for children who have never had the measles, to remain at home. We, therefore, decided that every school room that had ten percent or more of its children absent on account of measles be ordered closed. Only cases that were reported during a period of a week were counted. The children attending these infected rooms were not sent home until at the close of school at noon or in the afternoon; this was done to avoid as much as possible any unusual disturbance in school. An exclusion slip was handed to every child, informing its parents that it was excluded for two weeks unless a blank certificate which accompanied the exclusion slip was filled out and signed by a parent or guardian stating that the child had had the regular measles, in which case the child was permitted to return to school at once.

This procedure was carried out from May 5th to June 13th inclusive. Practically no complaints were made against this new practice by either the school authorities, teachers or parents. Children that were excluded were ordered to remain at home away from all other children, but their homes were not placarded. This procedure was carried out in fifty-seven parochial and public schools and in one hundred twenty-eight classes, distributed as follows: twenty-six kindergarten; sixty-four, first grade; thirty-four, second grade; and four, third grade.

The total enrollment of the various rooms that were closed was 5,104. The total number of cases reported from these rooms before they were closed was 995. The total number excluded was 3,480. Of this number 2,408 returned to school with certificates signed stating that they had had the measles and some 1,072 remained at home because they had never had measles. Out of the number that remained at home for two weeks, 171 developed measles. Out of the 2,408 that were permitted to return to school, because they brought certificates stating that they had had the measles, 42 developed measles. Out of the total number excluded for two weeks, 11 developed measles after they were permitted to again return to school. The 42 children who were certified as having had measles and who developed measles afterwards, were mostly from schools in poorer neighborhoods; 42 is not a large number and speaks very well for the honesty of parents. The fact that only 11 children developed measles after their two weeks exclusion from school, proves conclusively that either most of the children that were excluded for two weeks were immune to measles, or that there was no further exposure to measles after they returned to school. In no case was it necessary to close a room for a second time.

About two weeks after this practice had been inaugurated we noticed a decline in the number of measles cases reported. Whether this decline was due to the fact that the epidemic had run its course, or to the isolation of supposedly susceptibles, is difficult to determine. We believe, however, that the experiment was well worth trying if for no

other reason than that it permitted parents to keep their susceptible children home without having any difficulty either with the children or with the school authorities. The tendency of the health officer in the past has been too much not to do anything that might interfere with the school attendance of a child. We will probably all agree that nothing is gained in closing schools during epidemics, but wherever it is possible to isolate susceptibles in highly infected rooms, it is at least worth trying.

This same procedure has also been used by the Milwaukee Health Department in connection with an epidemic of scarlet fever in one school. All children were excluded and only those that showed a negative Dick test were permitted to return. The same practice might also be used in the control of other contagious diseases.

The Present Status of Chronic Infections of the Prostate Gland*

By JOHN B. WEAR, M. D.,
Department of Urology, University of Wisconsin.
Madison

It has ever been the desire of the medical profession to clarify those fields in which our knowledge is lacking. To this inquisitive attitude we owe our present development and our future progress. But, if our diagnostic and therapeutic armamentarium is to be complete, we cannot maintain an apathetic attitude toward those conditions which have been adequately described to us and which we think we understand. The acute diseases are dramatically impressed upon our minds, but the chronic diseases do not occupy such a fortunate position. Chronic prostatitis has been so long associated with venereal infection that we are slow to recognize it as a clinical entity. As early as 1836, Lallemand called attention to lesions in the prostate as being responsible for certain nervous and mental symptoms. The subject has more recently been well described by Herrold, Von Lackum, Young, and others.

Due to its position, histological structure, blood and lymphatic supply, the prostate is particularly prone to infection. Swinburne believes chronic prostatitis to be as common as chronic tonsillitis. In a review of over 2000 cases, Von Lackum concludes that 35% of all males have some degree of prostatitis. The infection may be initiated by a nonspecific urethritis, but this external route is rare. More commonly, the blood and lymphatic systems are the transporting agents. The original source of the infection is usually some focus elsewhere in the body; as, abscessed teeth, chronically infected tonsils, chronic sinusitis, chronic cholecystitis, and acute infectious diseases—remote or recent. About 50% of all cases of chronic prostatitis are the result of a gonorrheal urethritis, but the 50% that are not preceded by gonorrhea are the cases with which we are particularly concerned.

The most common infecting organism is the Streptococcus, usually in a mixed culture with the Staphylococcus and diphtheroids. In 109 cases, Herrold found the Streptococcus in 34%. In a series of 176 cases, we have found the Streptococcus present in 55%. The Bacillus coli is sometimes found, but it is usually associated with an upper urinary tract infection.

SYMPTOMS

The symptomatology of this condition is best divided into two groups; local and remote. Under local symptoms, we have both sexual and urinary symptoms. The sexual, urinary, and remote symptoms may all occur in the same patient, or they may occur singly. A complete enumeration of all the manifestations of this disease will not be attempted here, for they are numerous. Only those are included that we have seen and treated with relief.

Of the urinary symptoms, probably the most common are: (1) Frequency, (2) dysuria, (3) hematuria, (4) difficulty, and (5) urethral discharge. In addition to these,

* Presented before Fourth Councilor District Society, Lancaster, August, 1929.

we frequently see (1) suprapubic discomfort (2) perineal discomfort, and (3) pain in the groin along the course of the vas deferens.

In the sexual symptoms, we find (1) premature ejaculations, (2) nocturnal emissions, (3) impotency, (4) poor erections, (5) bloody semen, and (6) loss of libido. The sexual symptoms are more often found in association with nervous manifestations than with the urinary group.

Of the remote symptoms, we find the following as the most common: (1) Lumbar pain, (2) pains down the back of the thighs, (3) irritability, (4) depression, (5) nervousness, and (6) lassitude. With such an aggregation of symptoms, we can easily see why some of these patients come to be regarded as neurasthenics and go through life without adequate examination. The sexual and nervous combination has always been a vicious cycle, and without treatment leads to serious consequences. It is not unusual for a patient to present himself with a single symptom as his chief complaint.

To be able to understand these many symptoms, some knowledge of the verumontanum is necessary. As you know, this structure lies in the floor of the prostatic urethra and around its base we find the openings of the prostatic ducts—usually twelve in number. The repeated discharge of the infected prostatic fluid soon results in a congestion of the verumontanum, and in a certain number of cases extensive granulations form, which bleed easily, thus giving the hematuria. The verumontanum is also the seat of origin of most of the sexual sensations, and the symptoms arise from its involvement in the inflammatory process.

There are three symptoms which are worthy of special comment, because they so often suggest conditions other than prostatic infection:

Urethral discharge, either intermittent or as a morning drop, should direct our attention to the prostate gland. This symptom arises from the infected secretion which is discharged into the posterior urethra at intervals. It will not react to the ordinary treatment of urethritis and should not be confused with a chronic gonorrhea.

Pain along the vas deferens results from an extension of the inflammation to the vas, and the pain may be the forerunner of an epididymitis or it may be confused with a chronic appendicitis. We have treated two such cases with complete relief.

Urinary difficulty, of course, always suggests obstruction of some degree. The difficulty results from the associated congestion and enlargement of the gland, with a corresponding hypertrophy of the verumontanum which tends to block the posterior urethra. The symptom may not be constant, and this is due to periods of quiescence in the infection. Von Lackum has recently called attention to chronic prostatitis as causing a median bar, due to fibrosis in the median lobe. The condition is not relieved by operation, as the infection persists.

In making the diagnosis, the age of the patient must be considered. If he is in the age of benign hypertrophy, the diagnosis of prostatic infection is not dependable in the face of a large gland, because benign hypertrophy is usually associated with pus cells in the prostatic fluid.

The past history should be searched carefully for the possible presence of some initiating focus. If the patient has had gonorrhea, prostatic infection is more likely to be present, as the gonococcus prepares a fertile field for the introduction of secondary invaders.

Palpation of the gland alone is not to be depended upon. The postgonorrheal cases will usually show an enlarged, firm, and irregular gland, but the hematogenous cases may appear normal to the examining finger. However, there are two types of glands that should arouse suspicion—the small, firm gland, and the soft, boggy type. Sensation is usually increased, and in most cases there will be a rather marked tenderness to pressure.

After the microscopic examination of the urine, we next study the expressed prostatic fluid for pus. The normal secretion should not show over 6 to 8 white blood cells per field. The presence of pus cells in clumps is diagnostic. Usually there will be an abundant secretion. We have seen as much as a tablespoonful. However, the fluid may be

scanty, due to a blockage of the ducts with debris. The second examination may be more dependable, and the diagnosis frequently cannot be made until the second or third examination. Staining of the fluid is not necessary, and to compute the relative number of pus cells is advised against.

TREATMENT

The treatment should first seek to eradicate infected foci elsewhere in the body. This will necessitate a careful and painstaking search. Many times the history will give some idea as to the primary cause, but in most cases it will not. Rarely, no remote focus can be found.

Massage of the prostate should not be given more often than three times a week. The degree of pressure used will depend upon the pain and reaction of the patient. Diathermy and hot rectal irrigations are useful adjuncts at times. In the difficult cases and in those that have been treated for a while, dilatation should be used. This may be accomplished with a sound or the Kollman dilator.

Occasionally a gland will be found in which massage cannot be used, due to the pain. Other contraindications for massage are—(1) Tuberculosis (2) hypertension (3) debilitating diseases, as malignancy (4) immediately following instrumentation (5) recent illnesses (6) acute general or local conditions elsewhere in the body.

The massage is usually followed by a posterior instillation of some mild antiseptic, as 5% argyrol. After six to eight weeks of treatment, the patient is given a month's rest.

During the period of treatment he should be cautioned not to use alcoholic drinks and not to indulge in sexual excesses. The diet should be well balanced and of the high caloric type, with at least twenty-five hundred cubic centimeters of water daily.

In the refractory cases, particularly those with arthritic symptoms, a foreign protein therapy may be of some aid. Aolan intramuscularly and autogenous vaccines have been used with varying success.

When the patient returns, treatment is carried out exactly as before and continued until the prostate shows no pus after dilatation of the urethra and there is relief of the symptoms.

SUMMARY

The best results are obtained in those cases in which a primary focus has been located and removed. Relief of the annoying symptoms is seen very early and is most gratifying to the patient and physician. However, the eradication of pus from the prostatic fluid is not so readily obtained. The time necessary for cure is usually quite long, but the patient is usually willing to continue, for with cessation of treatment the symptoms soon return. At the very beginning, he should be informed that the treatment must be continued over a long period.

It is a disease easily treated without an elaborate equipment. The results will always justify the time and trouble it takes, and our field of usefulness is materially broadened.

General Considerations in the Management of Prostatic Obstruction*

By VERNE C. HUNT, M. D.,
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In the pioneer days of prostatic surgery the recovery of a patient from the operation of prostatectomy was considered a triumph, and the result of the operation was considered satisfactory if there was restoration of voluntary urination. Today, fatalities they may be regarded as the result of failure following prostatectomy are infrequent; to discriminate accurately between good and poor surgical risks and inability accurately to ascertain organic reserve, surgical accidents and coexistent disease. Results are determined not only on the basis of whether there has been restoration of voluntary urination following prostatectomy, but they

* Read before the Eau Claire and Associated Counties Medical Society, Eau Claire, Wisconsin, September 23, 1929.

may be considered good only when there is relief of all symptoms referable to the urinary tract.

In the evolution of prostatic surgery certain standards have been erected and certain demands have been made of the urologist and surgeon. Mortality has been markedly reduced and functional results have been greatly improved. However, it still is not possible to achieve success in the maintenance of life and restoration of normal function in all cases of prostatic obstruction.

At The Mayo Clinic, approximately 15 per cent of the obstructing lesions of the prostate gland are malignant as differentiated from true adenomatous hypertrophy and from the fibrous type of gland encountered in patients of the so-called prostatic age. Differentiation by clinical, cystoscopic, or other means is not always possible unless the malignant process is well advanced. Advancement of the disease usually is characterized by invasion of the prostatic capsule, seminal vesicles and periprostatic tissues, as determined by digital examination of the gland, and by roentgenographic identification of the presence of metastasis to the bones of the pelvis and spinal column or to the lungs. When such manifestations of advanced malignant disease are present, the condition is clearly unsuitable for any surgical procedure that is curative in purpose and is unsuitable for the administration of physical agents. About the only malignant lesion of the prostate gland which is truly operable is one in which the capsule and seminal vesicles are not invaded and in which there is no demonstrable metastasis; the diagnosis of a malignant condition cannot be made in such cases with any degree of certainty, and the lesion may prove to be malignant only at the time of prostatectomy, after a preoperative diagnosis of benign prostatic hypertrophy has been made. Each year, at The Mayo Clinic, about 6 per cent of the prostate glands removed contain a malignant lesion; for the most part, in these cases, prostatectomy was undertaken on a preoperative diagnosis of benign prostatic hypertrophy.

The problems which confront the urologist and surgeon, with the advent of obstruction in carcinoma of the gland, are manifest. When local extension of the disease, and local or remote metastasis definitely indicate its true nature, any treatment that is instituted may be regarded only as palliative. For obstruction and retention of urine, suprapubic cystostomy may afford the only method of relief. The question of palliative partial prostatectomy, for removal of the obstructing portion of the gland, in the absence of remote metastasis and the good general condition of the patient, has had some favorable consideration. Inasmuch as occlusion of the urethral channel usually recurs soon after partial prostatectomy, such procedure is justifiable only in isolated instances. Chute recently reported his experience in the treatment of carcinoma of the prostate gland and had occasion to repeat partial prostatectomy, with gratifying palliation. Instances have been seen in which radiotherapy has brought about shrinkage of the gland and retardation of growth, but, in general, physical agents have not been productive of much palliation in true carcinoma of the prostate gland.

Modern methods of treating benign prostatic obstruction are highly successful in restoring function and in the relief of symptoms referable to the urinary tract that are incident to obstruction. However, preservation of life under the circumstances of prostatectomy presents many problems, chiefly through the presence, in many instances, of associated organic disease coincident with prostatic obstruction, and because of the hazards of surgery in patients who are in the prostatic age.

ATTENDANT RISKS

Age is a most significant factor to be reckoned with in the consideration of risk attendant on surgical procedures for removal of prostatic obstruction. Occasionally, prostatic obstruction occurs in patients less than fifty years of age, but for the most part it is a disease occurring after the age of fifty years, and may be considered a disease of degeneration, although the pathologic change in benign lesions of the prostate gland is not necessarily that of a degenerative process.

In a series of 1973 cases that I reviewed at The Mayo Clinic some time ago, the average age was slightly more than sixty-three years, but there were nearly as many patients more than sixty-five years of age as there were patients who were less than that age. The average mortality rate for the entire series was 5 per cent. However, the mortality rate among patients more than sixty-five years of age was 6.3 per cent, as compared to 3.9 per cent among patients who were less than sixty-five years of age, or a rate nearly twice as great in the former as in the latter of the two groups. Furthermore, the mortality rate rose rapidly after the age of seventy years and attained the high rate of 17 per cent among patients who were more than eighty years of age. Unquestionably, the degenerative processes in vital organs, particularly in the heart, blood vessels and kidneys, in the aged, exert profound influences on mortality.

Cardiovascular changes are practically always present in patients of the prostatic age. These tend to become more pronounced after prolonged urinary difficulties have resulted in bringing about renal insufficiency, producing the so-called cardiovascular-renal syndrome so often encountered in the patient with prostatic obstruction. The patient with prostatic obstruction is not only possessed of mechanical obstruction at the neck of the bladder, but there is impairment of all bodily functions. In the light of present knowledge of the cause and effect of such disease, it is not reasonable to suppose that the patient has adequate organic reserve to withstand, without considerable risk, the insult of a major surgical procedure or that recovery will occur immediately in all cases after surgical removal of the prostate gland.

Diabetes, coincident with prostatic obstruction, presents certain definite problems when surgical measures must of necessity be instituted. However, modern methods of treating diabetes have for the most part reduced the hazards of operation. Therefore, everything else being equal, the risk of prostatectomy in the patient with moderate diabetes is little, if any, greater than in the patient who does not have diabetes. It is manifestly evident that in the presence of such coexistent disease the urologist and surgeon may wisely avail themselves of the counsel and cooperation of the internist.

In certain cases of prolonged prostatic obstruction, irreparable injury has occurred to vital organs, and never, even by most adequate management, can the patient be brought to a state of health whereby prostatectomy may be undertaken with any degree of safety. At times renal activity has been so seriously inhibited, as the result of urinary retention and infection, with actual destruction and loss of active renal tissue, that return of renal function to the degree of relative safety for prostatectomy never occurs. Many instances have been observed at necropsy in which life had been maintained on a minimal amount of active renal tissue. However, in most instances, preoperative treatment results in the restoration of bodily functions within the range of normal, or approaching normal, and operation may be undertaken with a reasonable degree of safety.

PREOPERATIVE PREPARATION

Experience has shown that no patient may undergo removal of an obstructing prostate gland and enjoy the maximal degree of safety without preoperative preparation. Also, no patient may be operated on with the maximal degree of safety until renal function, as indicated by renal functional tests, has become stabilized within or approximating normal limits. Furthermore, measures prescribed as a routine cannot be safely adopted; all patients cannot be treated preoperatively or surgically by the same methods and procedures. Individualization is necessary.

Mortality in prostatic surgery is largely in the hands of the surgeon, and, assuming that he utilizes all modern methods of preoperative, operative and postoperative management, is largely directly dependent on his selection of patients for operation. If he is conservative, and particularly interested in maintaining a low mortality rate, he will select for prostatectomy only the patients who are preferred risks and will deny the benefits that may be expected from prostatectomy to those who are advanced in

years and to those who possess associated organic diseases which increase the hazards of operation. Few patients with prostatic obstruction may be considered preferred risks, for most of them have associated disease incident to the prostatic age. Consequently, since the benefits of prostatectomy are so great, I am of the opinion that, with a liberal acceptance of substandard surgical risks in which strict contraindications to operation are not present, a mortality rate within 5 per cent is entirely legitimate. The highest mortality has occurred in patients in whom urinary retention has been present over a long period of time and in whom all bodily functions have been impaired. In other words, relief has been sought late rather than early. In many instances, palliative measures only may be instituted. A better prognosis may be rendered in those patients who have had urinary retention but a short time, before irreparable injury to kidneys and other vital organs has occurred. Inability to empty the bladder completely, as manifested by the presence of residual urine, indicates, in the presence of benign prostatic hypertrophy, the advisability of prostatectomy. Painful urination, difficulty, hematuria, and so forth, are of secondary importance to residual urine as indications for prostatectomy. Likewise, except in the presence of a large gland, absence of residual urine should cause one to hesitate to advise prostatectomy for urinary symptoms that may or may not be due to prostatic disease.

Facilities are at hand to obviate the ordinary hazards of prostatectomy. In order of frequency, the usual causes of death following prostatectomy are uremia, hemorrhage, and general sepsis. All patients with urinary retention which results in a variable degree of renal insufficiency and infection of the kidneys may be looked on as being potentially uremic and possessing lesions in the kidneys from which dissemination may occur, provoking a state of general sepsis. Preoperative treatment, in addition to improving all bodily functions, provides a method of reducing renal insufficiency and eliminating much infection from the urinary tract. A definite law may be laid down to the effect that preoperative treatment is essential in all cases in which prostatectomy is contemplated. It has been the practice at The Mayo Clinic, during the last four years, to institute preoperative drainage of the bladder in all cases and to maintain it for a minimum of ten days previous to prostatectomy. This is carried out even for those patients who are in good general condition and in whom renal function is apparently normal. Errors in judgment of renal function and of the time at which operation may be undertaken at times occur through improper interpretation of tests of renal function. The blood urea and estimation of excretion of phenolsulphonephthalein are indispensable and are of greatest value when repeated at frequent intervals. The information obtained from these tests provides only a relative estimate of renal function. Excretion of phenolsulphonephthalein has proved of greater value in recent years through employment of the fractional method of collecting the urine every fifteen or thirty minutes after its administration, and noting the time of appearance and rapidity with which the dye is excreted. The amount of dye excreted at the end of two hours is of secondary importance. Delayed excretion, even though adequate at the end of two hours, is indicative of incomplete stabilization; delay and low percentage excretion denotes poor renal function as does a persistently high blood urea. Rapid and normal excretion of phenolsulphonephthalein, and normal blood urea, do not necessarily indicate renal reserve. Sufficient renal tissue may be present to provide normal values in the functional tests; yet, I have seen instances in which uremia developed rapidly after operation. The renal functional tests may reveal frank renal insufficiency, but fail to indicate the absence or presence of renal reserve.

The need is great for some method of accurate determination or renal capacity. One may not wisely rely solely on renal functional tests in attempting to determine the magnitude of the danger of renal insufficiency occurring postoperatively. Often the poor general condition of the patient, in spite of practically normal results of renal functional tests, will cause one to suspect inade-

quate renal reserve. Physical test of adequate renal reserve, in those instances in which there is doubt, may be applied in the form of preliminary suprapubic cystostomy. In this, I believe, lies the chief advantage of the two-stage operation of prostatectomy when used as a procedure of choice rather than of necessity. Suprapubic cystostomy is not done without risk; the risk lies not in the magnitude of the operation, but in the condition of the patient at the time at which it is done. Lowsley recently reported a mortality rate of 8 per cent for suprapubic cystostomy for prostatic obstruction. Frequently I have observed more serious reaction on the general condition of the patient and greater reduction of renal function, as indicated by renal functional tests, following simple cystostomy than from the subsequent prostatectomy. In other words, I have found it distinctly advantageous, when in doubt regarding the advisability of the preferable one-stage operation, to subject the patient to the physical test of preliminary suprapubic cystostomy. The reaction of the patient to cystostomy may serve as a reliable guide to the time at which prostatectomy may be considered, and may indicate the relative degree of safety with which it may be contemplated.

SUPRAPUBIC CYSTOSTOMY

The question of suprapubic cystostomy returns us to the further consideration of treatment preliminary to prostatectomy. It has been stated previously that to insure the maximal degree of safety, preliminary treatment is necessary in all cases. During the period of preoperative treatment the most important factor is the institution of drainage of the bladder. This may be accomplished, either by the preferable permanent indwelling catheter or by suprapubic cystostomy. In the presence of complete, prolonged urinary retention gradual decompression by urethral catheter, unless the urethra is impassable, usually is the safest method of procedure and is extensively practiced even by those who finally employ the two-stage prostatectomy in all cases. In my experience, drainage of the bladder by urethral catheter preliminary to prostatectomy may be most satisfactorily accomplished in fully 75 per cent of the patients with benign prostatic hypertrophy, facilitating the one-stage visualized operation of choice.

The question often arises as to the selection of cases suitable for drainage by the permanent indwelling urethral catheter. First of all, experience has shown that, unless patients are of unusual vigor, few of those who are of advanced age withstand major surgical procedures well and in most patients in the latter half of the eighth decade, drainage of the bladder by cystostomy provides the divided operation. Associated abnormalities of the bladder, such as stones and large diverticula, require cystostomy for removal of stones and diverticula previous to prostatectomy. Also, patients with marked degrees of renal insufficiency, who require weeks and months of drainage of the bladder previous to prostatectomy are, from the economic standpoint, best drained by cystostomy, thereby reducing the interim period of hospitalization. Furthermore, about 6 per cent of patients in whom drainage by urethral catheter is instituted, are intolerant of the catheter or urethral intolerance develops, and therefore they require cystostomy for drainage. With few exceptions, drainage in all other cases may be safely and adequately effected by urethral catheter and the patients may be prepared for the one-stage operation in this way. The associated cardiovascular and other organic functions may be materially benefited through the cooperation of the internist during the period of drainage. Drainage is instituted, not only for relief of obstruction, and to provide a means of completely emptying the bladder, but for the purpose of improving renal function, fortifying the patient against postoperative uremia and reducing infection in the urinary tract. The length of time over which drainage is necessary is entirely dependent on the general condition of the patient and on the results of renal functional tests. Except under most unusual circumstances, prostatectomy may not be safely contemplated until renal functional tests have become firmly stabilized within, or approaching, normal limits.

At The Mayo Clinic one-stage suprapubic operation is considered the one of choice and in the last 422 cases on my service, since January, 1927, it has been employed in 76 per cent; the two-stage operation has been regarded as one of necessity. Obviously, the period of drainage by cystostomy, since it is reserved for those patients in whom the one-stage operation is not suitable, is much longer than the period of drainage for the one-stage operation. In a series of 100 cases recently reviewed, the time interval between suprapubic cystostomy and prostatectomy varied from fourteen days to nine and a half months. It was less than three weeks in 28 per cent; in an additional 24 per cent it was four weeks, and increased in the remainder, until in 16 per cent it was prolonged for from three to nine and a half months. Certainly, in few instances in which the two-stage operation is employed as one of necessity rather than as one of choice is the condition of the wound and the general status of the patient such that prostatectomy may be contemplated in less than three weeks from the time of cystostomy.

To consider in general the surgical procedure of prostatectomy, there seems to me little argument in favor of the two-stage operation as one of choice in all or in most cases. Although the postoperative period of convalescence is practically the same for the one-stage and for the two-stage operation, the average length of stay in the hospital for the two-stage operation, including the period of drainage, is considerably longer than in the one-stage operation. In 200 recent cases the patients' average postoperative stay in the hospital for the two-stage and for the one-stage operations was thirty days and twenty-nine days respectively, even though the postoperative time in the hospital ranged from fourteen to as long as seventy-six days in a few cases. Closure of the suprapubic wound occurs earlier in the one-stage operation than in the two-stage operation. Fifty-eight per cent of the patients who underwent a one-stage operation had healed wounds and were dismissed with good functional results well within four weeks, whereas 51 per cent who underwent the two-stage operation were dismissed under similar circumstances within the same period. Of the patients who remained in the hospital more than six weeks after operation because of retarded closure of the wound, a persisting sinus, and complications, the average postoperative stay in the hospital, after the one-stage operation, was fifty-one days as opposed to fifty-nine days for the two-stage operation.

Without entering particularly into discussion of the relative merits of the one-stage and the two-stage suprapubic operation, it may be stated that the two-stage operation possesses the disadvantage of excluding, at prostatectomy, the sense of sight which is necessary in employing accurate methods of procedure and complete hemostasis. Accepting the two-stage operation as one of necessity in certain cases, the disadvantages of the two-stage operation must as yet be accepted. That the divided, blind operation should be used in all, or most, cases is not in accordance with modern methods of procedure. The operation in two stages does not give the same prospect of a good, ultimate, functional result, as the one-stage operation in which, under visual control, all obstructing prostatic tissue can be removed, leaving a clean-out vesical neck and a prostatic capsule devoid of prostatic fragments. The most common surgical accident is inaccurate and incomplete hemostasis, resulting in continued or postoperative bleeding. Modern methods of procedure provide accurate hemostasis and postoperative continued bleeding and bloody urine are no longer readily condoned.

The problems of epididymitis, its prevention and treatment, the question of anesthesia, of postoperative complications, of causes of failure of prostatectomy, and so forth, represent a few of the many phases in the management of prostatic obstruction worthy of consideration. It has been my desire to confine the subject at this time more or less to general principles of importance.

CONCLUSION

In concluding these remarks it is my opinion that when urologists and surgeons have accepted the edict that treatment pre-

vious to prostatectomy is necessary in all cases, and that prostatectomy is best performed in accordance with the general principles of surgery, such as may be applied only in the one-stage operation (which provides visualization, accurate removal of the obstructing lesion and complete hemostasis), that many of the difficulties encountered in the surgical treatment of benign prostatic obstruction will have been obviated.

Acute Lymphatic and Myelogenous Leukemias; with Report of Two Cases

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Acute lymphatic leukemia is usually defined as a progressive and fatal disease of unknown etiology characterized by an acute or relatively sudden onset with fever, marked prostration and a tendency to necrotic processes in the mucous membranes of the throat and mouth. Hemorrhages from the mucous membranes and into the joint cavities are common. Enlargement of lymph glands, spleen and liver is variable; the blood picture usually shows a severe and progressive anemia and a lymphocyte count which is either normal or greatly increased; purpuric hemorrhages of the skin are common. Acute lymphatic leukemia is quite frequently seen in young persons less than twenty-five years of age, in children under five and occasionally in infants. It is more common in males than in females. The symptoms are those of a severe acute infection and if the blood picture does not show the characteristic enormous increase in the lymphocytes a diagnosis is sometimes very difficult to establish.

Acute myelogenous leukemia is characterized by an abrupt onset with pronounced hemorrhagic tendencies, high fever and rapidly developing severe anemia. The course is that of a severe acute infectious disease. Enlargement of the cervical lymph glands is variable, the spleen is usually palpable but not greatly enlarged. The disease may prove fatal before the blood shows the characteristic picture. It is an extremely rare disease. Children and youths are more often afflicted. It is not known to occur in infants and elderly persons.

There is considerable dispute with regard to the division of the cases of acute leukemia into acute lymphatic leukemia and acute myelogenous leukemia. Some observers deny the existence of acute myelogenous leukemia. It does seem to be true, however, that in a certain percentage of cases of leukemias, pathologic studies show that the cellular disturbance apparently concerns cells of the myelocytic series.

Rubnitz in a recent article on the etiology of acute leukemias concludes that he fails to see any logical reason for the division of leukemias into lymphogenic and myelogenic types, because clinically they represent the same entity. Microscopically, they can not always be differentiated. He considers the oxydase reaction only of value, if positive. Acute leukemias are always associated with infection, but he does not believe they are due to any specific microorganism.

Necrotic inflammation of mucous membranes is usually associated with acute leukemias and with the condition known as agranulocytosis. Rubnitz believes that some obscure toxin in nature a leukocytolysin liberated by necrotic membranes is responsible for acute leukemia and agranulocytosis. The toxin in both conditions may be the same quality; the difference in body reaction is due to quantitative variations in toxins produced and liberated.

The sharp differentiation in the type of acute leukemia is at times very difficult and will depend to a certain extent upon the stages of the disease at which the blood is studied; this will be shown later. The differentiation is of more interest pathologically than clinically.

In both types of leukemias there is an anemia which is rapidly progressive in char-

acter frequently with a high color index. In the lymphatic type the number of leukocytes may be normal, subnormal or moderately increased. The myelogenous type is more often associated with a somewhat higher count, the average figure is about 30,000; normoblasts and megaloblasts are frequently found in both types. In acute lymphatic leukemia, lymphocytes comprise about 90 per cent of the total number of white cells. The number of polynuclear neutrophilic and eosinophilic leukocytes is greatly reduced both relatively and absolutely.

In the myelogenous type the predominant cell is the myeloblast. At first glance a smear may appear to contain large lymphocytes which suggest acute lymphatic leukemia, but careful examination usually shows that many of these lymphoid-like cells contain fine neutrophilic granules and are actually cells transitional between myeloblasts and myelocytes. These cells may constitute 30 to 60 per cent or more of the white cells. Mature polynuculear leukocytes are rare. In some cases in which small myeloblasts are present the resemblance to lymphocytes is even greater. The oxydase test, if positive, gives proof of the myelogenous origin of the cells; if it is negative there is still room for debate, since very young myeloblasts do not react positively.

CASE REPORTS

We wish to report two cases. One of acute lymphatic leukemia in a baby girl aged twenty-one months, the other a case of acute myelogenous leukemia in a woman aged forty-four years. The blood picture of the first case at the time of examination was not characteristic of acute lymphatic leukemia; the child presented clinically the picture of scurvy, the disease with which acute lymphatic leukemia was most often compared in the older text books.

Case 1. A baby girl aged twenty-one months was referred to the Section on Rhinology and Otolaryngology, Jackson Clinic, because of sore gums and angina. Examination in that section revealed that the condition was not an acute infection. The patient was then transferred to the medical section with a notation that the findings in the mouth and throat resembled a picture which is often seen in certain blood dyscrasias.

Two weeks before admission the gums became swollen, especially of the lower jaw, which was at first thought by the attending physician to be due to the eruption of a tooth; this condition increased until the gums of the entire lower jaw became swollen and a similar condition appeared in the upper jaw. Some swelling of the eyelids, cheeks and ankles was noted. There was no fever or chills at the time of onset.

The mother stated that the baby was born at full term, she had always been well and after weaning had been fed on a general mixed diet, there had been no illness of any moment; the father and mother were healthy.

Physical examination showed a fairly well developed well nourished baby aged twenty-one months, she was pale and presented an appearance of being quite ill. The scalp was negative, eyelids edematous, ears grossly negative. There was a swelling of both cheeks which was defined as a peculiar induration. The gums, especially of the lower jaw were markedly swollen, bluish red in color and bled easily. The tonsils were swollen and presented somewhat the same appearance as the gums; there were no areas of ulceration. The heart and lungs were negative, the abdomen was somewhat distended; the liver was greatly enlarged; the spleen could not be palpated. A swelling of the right limb extended from the middle third of the thigh to below the knee. Movement of the limb produced some pain but was not as marked as in pain from scurvy. There were a few hard discreet lymph nodes in both sides of the neck, axilla, and the groins.

Roentgen ray examination of the chest was negative, the long bones revealed evidence of healed rickets, the right thigh showed no evidence of subperiosteal hemorrhage. It was, therefore, concluded that this hemorrhage had occurred into the subcutaneous tissues.

Blood examination December 25, 1928 showed red blood cells 3,660,000, hemoglobin 55 per cent, leukocytes 8950, differential count: lymphocytes 52 per cent, transitionals 3 per cent, neutrophiles 41 per cent, myelocytes 4 per cent, platelets 210,000; bleeding time six minutes, coagulation time three minutes, the urine showed a faint trace of albumin. December 28, 1928, red blood cells, 3,500,000, leukocytes 15,750, lymphocytes 65 per cent, transitionals 3 per cent, neutrophiles 25 per cent, myelocytes 7 per cent. December 30, 1928, leucocytes 26,000; the differential count was the same as December 28, 1928.

A few days after admission the child developed a temperature of 102° F. which remained practically constant until her death. Prostration became more marked, the child refused food, and death occurred December 30, 1928.

On December 29, 1928, under local anesthesia Dr. R. H. Jackson removed a gland from the groin. Sections of the gland showed hyperplasia and an infiltration with large lymphoid cells. The slide

was referred to Dr. C. H. Bunting, of the Department of Pathology, University of Wisconsin, who concurred with our diagnosis of acute lymphatic leukemia.

Case 2. A woman aged forty-four entered the Methodist Hospital, January 1, 1929. Three weeks before admission she had developed a severe "croupy" cold. The glands of her neck became enlarged and at the same time a feeling of constriction in her chest made breathing rather difficult. This was associated with a severe cough which later became productive, the expectoration being foamy. The cough improved about a week after the onset. About that time the gums became swollen, red and very sore with a purulent discharge from the dental margins. Nose bleeds had occurred frequently from the time of onset of her illness. There was nothing in her past history or family history which had any bearing on her illness.

At the time of examination she appeared extremely ill, especially noticeable with regard to her pallor and apparent weakness. Her nutrition was good and she breathed without difficulty; speech was difficult on account of hoarseness. The gums were swollen, red and bled easily; they were covered with greyish ulcerated patches, the necrotic tissue on these patches sloughed readily. There were similar greyish patches on the soft palate and uvula. At the base of the neck, anteriorly and front of the chest, were four or five ulcerated papules covered with dark brown crusts. There were a few very small glands in both upper anterior cervical regions.

The heart and lungs were negative. The spleen was not palpable. The liver edge was readily felt 3 cm. below the costal border. Temperature 100° F. pulse rate 112, respiration 20. The urine and other examinations were essentially negative. Blood examination showed hemoglobin 45 per cent, red blood cells, 2,160,000, white blood cells 33,800, differential count: myeloblasts 52 per cent, myelocytes 8 per cent, small lymphoblasts 20 per cent, polynuclear leukocytes 20 per cent. The predominating cell was larger than a polymorphonuclear cell. Some of the nuclei of these cells were round, some oval and others kidney shaped. The protoplasm was relatively large in amount. The characteristic granules found in the protoplasm of myelocytes were absent in about half the cells. Some of the others were partially formed so it was impossible to differentiate morphologically between a myeloblast and a lymphoblast. The peroxidase test was carried out and was positive; when positive it is proof that the cell is of myeloblastic origin.

During the next five days the blood picture remained about the same, weakness progressed, breathing became very labored, her temperature rose to 104° F. and remained constant until her death. Autopsy was refused.

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ColloidAbility Test in Tuberculosis

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All evidence from available experimental data points toward the fundamental importance of the blood plasma in the physiological equilibrium of the body and toward the significance of qualitative and quantitative alterations of its constituents. A study of these changes with the purpose in mind that they may serve as valuable aids in our clinical work seems to be justified, considering the difficulties we meet in the diagnosis and prognosis of tuberculosis.

Blood plasma contains five to eight per cent of coaguable proteins. These may be classified on the basis of their behavior in the presence of neutral salts or, according to their thermostability. Fibrinogen is precipitated on the addition of magnesium sulphate, fifteen to twenty-seven per cent solution; euglobulin, twenty-eight to thirty-eight per cent; pseudoglobulin thirty-six to forty-four per cent and albumin on the addition of saturated solution of magnesium sulphate. The amount, colloidal-state as well as albumin-globulin ratio may deviate from normal under the effect of physiological or pathological alterations in the body. The blood serum used in routine laboratory work represents plasma divested of fibrinogen.

Different methods and tests have been devised by several students to utilize the greater precipitability of serum proteins in certain pathological conditions for the diagnosis of tuberculosis, or for the determination of toxity and prognosis. Matefy used one-half per cent aluminum sulphate solution, Lange silver nitrate, Montank tricresol,

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Vernes resorcinol and Daranyi a solution of salt and alcohol. The reports on the value of these tests are extremely divergent, some claiming excellent results, others very unsatisfactory value.

In our present study we followed the technic described by Daranyi (1) and based on the three-fold effect of salt, alcohol and heat upon the serum proteins, as follows; "Two-tenths of a cubic centimeter of active serum is put in a long narrow test tube (twelve centimeters long or less and of eight millimeter bore) and well mixed with one and one-tenth cubic centimeter of diluted alcohol and placed in water at sixty-two to sixty-three degrees Centigrade for twenty minutes. The dilution of alcohol is always to be freshly made from ninety-six per cent alcohol. To one cubic centimeter of it is added four and one-tenth cubic centimeters of a two per cent common salt solution (this is always made freshly from a twenty per cent stock solution). The test tube is to be examined immediately and afterwards at intervals of one-fourth, one-half, one, two, three and twenty-four hours following the heating in such a way that when one stands before the window one holds it up toward the ceiling, tilting it, but without shaking it looks for flocculation with naked eye. All sera become opalescent, but agglutination, like flocculation is found only in positive sera. One notes the time of flocculation and only after twenty-four hours can its definite degree be determined. According to the greater or lesser extent of cell disintegration there can occur a complete or partial coagulation, a large or fine flocculation, or a flakeless negative reaction. The time required for the flocculation indicates rather the quantity of globulin and the size of the flakes at its dispersion. A complete or partial coagulation is to be seen immediately after heating, but a reaction with large flakes is to be examined after twenty-four hours, when one observes conglomerated, unequal and large flakes by tilting the test tubes. They are map-like and irregular in appearance when looked through in a vertical position. After twenty-four hours reactions with fine flakes yield flakes of one to one and a half millimeters at the most and these are nearly equal in size and do not adhere to one another. If the tube is not tilted they appear milk-like and homogenous. The less the serum dispersion the larger the flocculation. For the better development of flakes in twenty-four hours it is advisable to tilt all test tubes at the intervals mentioned above. All tubes must be tightly corked."

We recorded our readings in fifteen and thirty minutes, one, two, three and twenty-four hours and classified the very fine flaky precipitate as one plus; fine flaky precipitate as two plus; large flakes as three plus and coagulation as four plus. Daranyi states that fine flocculation in twenty-four hours can be found in most cases of superficial catarrhal processes. In our experience very fine flakes in twenty-four hours were met with in a considerable number of normal persons and in patients suffering from malnutrition or noninflammatory conditions. Hence, we seemed to be justified in considering very fine flocculation in twenty-four hours as a negative reaction.

Eleven persons in whom no pathology could be detected on physical, roentgenological and laboratory examination gave negative reaction; out of twelve cases with malnutrition, nine had negative reaction and three had one plus reaction in three hours. Eight negative tests were found among seventeen cases with non-tuberculous pathological conditions. The presence of a mild positive reaction in three cases of malnutrition can not be explained unless one supposes the presence of a possible latent tuberculosis or focal infection, undetectable by clinical means, though Nassau and Hendelsohn (2) report positive reactions in children with certain nutritive disturbances. The group of non-tuberculous cases showing negative reaction includes one of each of the following conditions: chronic bronchitis, pneumoconiosis, bronchial asthma, convalescence from bronchopneumonia, psychoneurosis, mitral regurgitation, chronic hypertrophic tonsillitis, and convalescense from influenza.

Tuberculous patients in this study were arranged in four groups: first, minimal, second, moderately advanced, third, far advanced and fourth, hilar, pleural and extra-

pulmonary forms of tuberculosis. The readings were graphically recorded, the size and amount of floccules forming the ordinate and the time of readings the abscissa.

Of the ninety-one undoubtedly active far advanced pulmonary cases, only two or two and one-tenth per cent gave a negative reaction. These findings do not corroborate the claim of Daranyi, that a negative reaction excludes all active, sputum positive tuberculosis. Remarkable observations concerning negative colloid lability test were published by Kuchen (3), Pinner (4), de Jong, Wolff and Azerad (5). Kuchen (3) found that twenty-three per cent of far advanced pulmonary tuberculosis cases gave negative reaction: Pinner (4) reports seven and six-tenths per cent negative reactions in far advanced tuberculosis, while de Jong, Wolff and Azerad (5) also note the occurence of negative tests in similar cases. The majority of these cases were in a terminal or preterminal stage and the negative outcome of the test is probably due to the diminution of the total serum protein characteristic of this condition.

Following is a brief description of our two negative cases belonging to this group: Number thirty-one, a twenty-four year old male with negative colloid lability test, had a tuberculous process, caseous in nature, of six months duration, involving both entire lungs with multiple cavitation, complicated by a specific enteritis. This patient ran a febrile temperature, had chills and night sweats and died three months after the test was performed. Case, number fifty-eight is a three-year old child with a bilateral involvement, febrile temperature and rapid pulse. Her general and pulmonary condition had improved markedly since the date of the negative test.

Due to the fact that increased precipitability of serum proteins is considered a result of the effect of systemic or focal infection, toxin production and tissue destruction, one would naturally expect a proportionate increase in the intensity of the reaction with the increased spread and activity of the disease. Such parallelism between the type and activity of the tuberculous process and the results of the colloid lability test was observed by Duzar (6) in children and by Kuchen (3) in adults. Daranyi (1) found the colloid lability to be a very useful quantitative index of tissue disintegration in tuberculosis.

It appears from our study that the majority of the far advanced cases showed colloid lability closely related to the extent of the involvement of the lungs and toxicity of the patient. All patients with four plus reaction had marked activity with characteristic symptoms and signs. It can be said that the earlier the appearance of a four plus reaction, the more toxic the condition. Coagulation in thirty and sixty minutes and an acute high graph has been considered a sign of a rapidly progressive destructive process. No coagulation could be found in far advanced cases without marked toxic symptoms, nor in cases showing clinical improvement. However, some very toxic cases showed only large flocculation even in twenty-four hours. In general, a three plus reaction, that is, precipitation in large floccules, should be interpreted as of just as serious significance as the four plus reaction, though the occurrence of cases with mild or moderate toxicity in this group has been more frequent than the same in the previous group. Special attention should be given to the time of the appearance of the large floccules, and the same rule applies in recording the one and two plus phases.

The majority of cases with two plus reaction were far less toxic than those in the previous two groups and often were in a condition approaching quiescence. Some of the patients in this group had rapidly progressing lesions with mainfest toxicity.

The moderately advanced group includes fifty-seven cases, eight of which had negative reaction, representing fourteen per cent of this group. Pinner (4) found negative reaction in eight and a half per cent of the moderately advanced tuberculous cases. The clinical diagnosis was corroborated by roentgenographic and laboratory evidence in all these negative cases and all presented subjective symptoms and signs of activity and toxicity. Of the patients having two plus reaction all but one showed mild or moderate activity and absence of fever or

else subfebrile temperature and minimal physical discomfort. Some of them became quiescent since. The very toxic cases were fewer and the clinically improving cases more numerous in the three and four plus groups of the moderately advanced cases than they were in the far advanced group; that is, the discrepancy between symptomatology and physical findings on one hand and colloid lability on the other hand is more manifest in moderately than in far advanced cases.

Pinner (4) using the same method as applied in this study found that twenty-six and eight-tenths per cent of incipient cases gave a negative reaction. Of our thirteen minimal cases, five or about thirty-eight and four-tenths per cent with variable signs and symptoms of activity and with definite clinical findings showed negative colloid lability test. It appears from this fact that the test can not be utilized as a safe measure in diagnosing early tuberculosis.

Another fact which lessens the value of this procedure in diagnosis is that a great variety of non-tuberculous conditions involving the disturbance of the colloid balance of the serum may cause positive reaction: for example, acute bronchitis, tonsillitis, nephritis and pregnancy. Daranyi (1) states that conditions associated with tissue destruction are liable to disturb the colloidal composition of the blood, causing positive reaction. He emphasizes the point that in evaluating the readings of this test the presence of pathological conditions other than tuberculosis must be excluded. Kroemeke (7) found positive reaction in syphilitics and Baldassare Sardo (8) in a case of chlorotic anemia. Of our non-tuberculous cases, the following had positive reaction: one of each, pulmonary cancer, syphilitic aortitis, subacute bacterial endocarditis, chronic otitis media, chronic tonsillitis, encapsulated empyema, Hodgkin's disease and two cases of bronchiectasis.

Seven negative reactions occurred among eighteen cases of hilar, pleural and extrapulmonary tuberculosis. This group includes two cases of skin tuberculosis, both positive; seven bone and joint tuberculosis cases, five of whom were positive and two negative; three negative and two positive reactions were found in patients with pleurisy; two with hilum tuberculosis showed negative and one with cervical lymphadenitis a positive recation.

In most of our cases this test was followed up by red cell sedimentation readings and differential count with special interest on the monocyte—lymphocyte ratio. Although the laboratory data gained by these procedures show some discrepancy in several instances, they are usually mutually confirmatory. Special investigation is needed for the study of the few cases with contradictory data.

The colloid lability test was repeated after an interval of about three months in forty-one positive cases. In one case who died shortly after the second test a previously markedly positive test became negative. In eighteen cases no change was found due to the stationary nature of their disease. In nineteen patients the clinical changes were associated with corresponding variations of the reaction. Discrepancy between the clinical course and the colloid lability test was found only in three patients with repeated tests. These findings, though limited in number, are in harmony with the reports of other investigators and strongly suggest the usefulness of the colloid lability test for the determination of immunological improvement during the course of the disease and perhaps for establishing indications for appropriate treatment.

CONCLUSIONS

I. A study of the colloid lability test in two hundred and nineteen cases is presented.

II. The test is not a specific reaction and cannot therefore be used for diagnosis.

III. Positive reaction occurs in conditions caused by focal or systemic infection and in cases of tissue disintegration.

IV. Tuberculosis does not necessarily produce a positive reaction. Two and one tenth per cent of our far advanced, fourteen per cent of the moderately advanced and thirty-

eight and four tenths per cent of the incipient cases gave negative reaction.

V. In the majority of positive cases there is a definite parallelism between the colloid lability reaction and the extent and activity of the lesion.

VI. There is a close relationship between the colloid lability test on one hand and the blood cell sedimentation test and monocyte-lymphocyte ratio on the other.

VII. Repeated tests may serve as useful indicators of immunological changes in the body and may help us in the clinical management of our cases.

VIII. The colloid lability test should never be considered alone. It is an appreciable aid only in connection with complete clinical and laboratory data.

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THE JOURNAL CLINIC

Embolectomy; Case Report

By JAMES P. DEAN, M. D.,
and
MARRES H. WIRIG, M. D.,
Madison

The outcome of an embolectomy, if successful, is of such stupendous value, that surgeons should be alert to the conditions arising and should not hesitate as to the treatment. The operative procedure is of a rather marked simplicity and is frought with a minimum of danger to the patient. An embolus which causes circulatory disturbance of a threatening character in the upper or lower extremities should be removed by an arteriotomy unless contraindications are present.

This case is being reported in hopes of stimulating further interest in methods of re-establishing the circulation and to report a new etiological factor, inasmuch as no cases have been reported following injury to the lung with interstitial emphysema of the subcutaneous tissue.

REPORT OF CASE

The patient entered the hospital July 14, 1928, as an emergency case and was first observed in the emergency department by the house surgeon. The history was that of an automobile accident occurring one hour previous to admission, the car turning over in a ditch and resulting in a considerable shaking up of the patient. Additional history was irrelevant at this time, the patient having been in good health prior to the accident.

Physical examination presented an old man of about 74 years of age lying quietly on a stretcher. He seemed somewhat dazed and frightened but answered questions in German with comparative ease. He did not seem to be complaining of much pain. He appeared somewhat obese; however, this observation was not sustained and upon closer scrutiny it was determined that the subcutaneous tissue was distended and crepitation was elicited extending from the hair margin down over the face, neck, chest and abdomen, ending at Poupart's ligament. The arms and forearms presented this same con-

dition. The tissue was resilient and could be depressed to a depth of one inch.

Regional examination disclosed no scars, fractures or deformities of the head. The eyelids were swollen and almost completely obliterated the palpebral opening. The pupils were regular, equal and reacted to light and accommodation. External occular movements were normal. The nose and ears were essentially normal except for a slight deafness in the right ear. His teeth had been removed several years before and were replaced by plates. His tonsils were fibrotic and embedded. His tongue protruded in the midline.

The subcutaneous emphysema was quite pronounced over the neck and extended down onto the chest; here the emphysema was very evident, anteriorly and posteriorly. Palpation over the right side of the thorax elicited considerable pain and a fracture of the third and fourth ribs was suspected. Auscultation and percussion were inaccurate due to the emphysema.

The heart seemed within normal limits both as to size and position. The heart sounds were very distant and no murmurs could be elicited. The rate and rhythm were regular and the blood pressure was 150/87. The radial pulse showed evidences of advanced sclerotic changes.

The abdomen seemed somewhat distended. However, this proved to be only considerable emphysematous changes in the subcutaneous tissues. No tender areas, masses, or muscular rigidity were present. The liver, spleen and kidneys were not palpable.

The upper extremities showed marked emphysematous changes extending down to the wrist. The right arm could not be moved without eliciting severe pain. However, no evidence of fracture of the bones of the arm or forearm existed. The right scapula was examined and seemed to move outward and downward in an abnormal manner yet no evidence of gross fracture could be demonstrated.

The lower extremities were essentially negative exhibiting no evidence of fracture or bruises. The deep reflexes were present and normal and no pathological reflexes could be elicited. The scrotal sac was enlarged and seemingly filled with air to about the size of a large grapefruit.

X-ray studies showed a complete transverse fracture of the right scapula and multiple rib fractures including the right third, fourth and fifth ribs posteriorly about two inches from the dorsal vertebrae. The subcutaneous emphysema was responsible for a most bizarre appearance of the individual muscles, particularly the sternomastoid and pectoral muscles.

The patient was put to bed immediately and given relief from pain and discomfort by means of morphine. His progress the first two days showed an increase in the amount of interstitial emphysema especially over the chest and face. However, on the sixth day, this condition began to subside. He at no time experienced difficulty in breathing or in cardiac embarrassment.

On the seventh day of his admission his condition was markedly improved. The subcutaneous emphysema had almost completely disappeared. About 9 o'clock A. M., while in bed, he suddenly cried out complaining of a sudden excruciating pain in his right thigh and leg. He stated that his leg and foot seemed hot and burning and was beginning to feel numb. Examination within five minutes from onset disclosed the right leg and foot pale and ischemic and mottled with bluish discolored areas. The temperature of the extremity was markedly decreased. Activity of the extremity was decreased and the deep reflexes were somewhat reduced. There was no pulsation in the dorsalis pedis artery nor in the popliteal artery. There was exquisite tenderness in the right groin over and just below Poupart's ligament. There were several areas of hyperesthesia and paraesthesia over the thigh and leg. A diagnosis of embolus of the femoral artery was made and the patient was sent to the operating room at once where he was prepared immediately for an operation.

The operation was performed under local anesthesia and an incision was made over the femoral artery just below the femoral ring extending downward about 3 inches. The artery was not pulsating and was rather hard, exhibiting marked arteriosclerotic changes. The artery was opened just

below Poupart's ligament and a large thrombus was observed extending upward to the external iliac artery and downward for about 3 cm. No bleeding occurred in the incised artery. The thrombus was removed. Upon removing this there was a gush of blood indicating the restoration of the circulation. The opening was cleansed with a 2% solution of sodium citrate. Arterial suture was performed. Upon closure of the wound, circulation was restored to the extremity immediately and a pulse could be detected in the popliteal and dorsalis pedis artery and the color returned to normal. The patient was taken to his room where the leg was elevated on pillows and heat applied continuously.

His convalescence was uneventful except that a small embolus probably passed on from the original and ended in the principis hallucis artery of the big toe resulting in gangrene of the toe. The toe was removed as soon as a definite line of demarcation was evident. His recovery otherwise was uneventful and he walked out of the hospital on September 23, 1928, completely recovered.

COMMENT

Arteriotomy was first attempted by Sudbauejew in 1895. The first successful embolectomy was performed by Labey in 1911. Since then more and more cases have come to operation until the literature to date records a total of 98 cases. The gross percentage basis of complete recovery is 19.5% with the addition of 2 cases reported from The Mayo Clinic and our own.

As to the etiological factor in this case, we believe that the point of origin was from the lung with secondary thrombus formation. As to the length of time before secondary thrombus formation occurs, we are of the opinion that this occurs almost at once as probably only an hour elapsed from the onset of symptoms until the embolus was observed and at this time the thrombus was fully 6 cm. long. This in itself speaks for early diagnosis and early surgical treatment.

Probably the most important factor is an early diagnosis and early surgical treatment. Had we waited longer than two or three hours, we believe that the ultimate result would not have been as satisfactory as the one obtained. Early diagnosis and prompt removal insures a higher percentage of cures.

In the ever growing number of automobile accidents occurring daily, with injury to the lungs resulting from fractures of the ribs, we believe that one should always be on the lookout for conditions arising similar to this and to institute surgical treatment as early as possible.

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Cardiospasm and Concomitant Esophageal Diverticulum; Case Report

By J. P. ZOHLEN, M. D.,
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Sheboygan

The writer feels justified in reporting the following case of cardiospasm associated with diverticulum of the esophagus, in view of the apparent rarity of the condition.

In reviewing the literature on the subject one is struck by the rarity of reported cases.

Whilst the pulsion, the traction and traction-pulsion types of diverticula may be considered also as comparatively uncommon esophageal conditions, cardiospasm associated with esophageal diverticulum must be considered a rather rare clinical phenomenon.

Vinson[1] reports two cases of cardiospasm associated with esophageal diverticulum in the middle third of the tube. Of these two cases, one was a male, age 49, the other a female age 47 years.

Fitzgibbon[2] reports the case of a male, age 40, with cardiospasm and concomitant esophageal diverticulum of the upper end of the esophagus, the pouch being evidently of

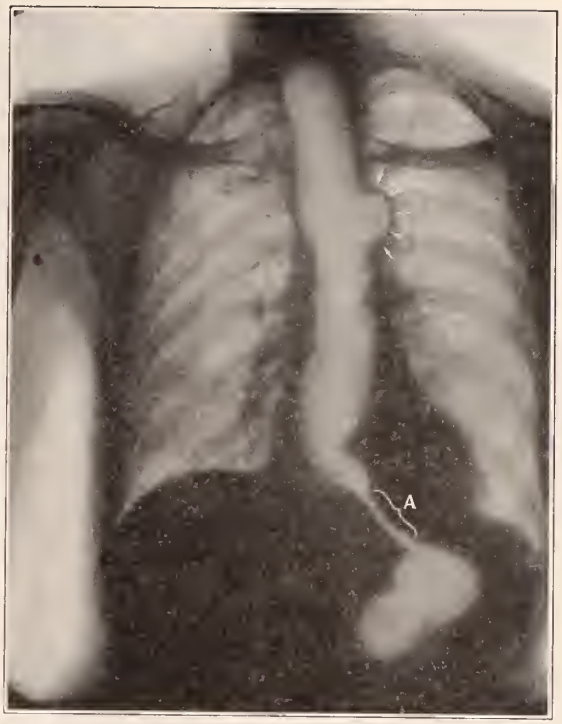
the pulsion variety. The same author reports[3] the case of a patient, male, 61 years old, with a cardiospasm associated with diverticulum of the lower end of the esophagus.

In a recent personal communication, Vinson reports to have had also a case of pharyngo-esophageal diverticulum associated with cardiospasm this latter case having as yet not been reported.

Crile and Dinsmore[4] report a case of pulsion diverticulum of the esophagus associated with cardiospasm.

CASE REPORT

The case to be here reported came to The Sheboygan Clinic on July first of the current year, giving a history stated briefly as follows: patient N. B., male, age 72, enjoyed fairly good health all his life up to about six years ago. At that time, whilst eating a hearty meal, consisting mainly of meat, he felt that the bolus of meat "kept sticking in the chest". Since then he has had "trouble off and on in getting food into the stomach." Epigastric and low substernal pain soon developed and have been more or less of daily occurrence, the symptoms having become progressively worse during the course of his affliction. The pain, as a rule, comes on immediately after the ingestion of food. Regurgitation has been an early symptom and still persists. Periodic vomiting developed late and is at times very annoying. Physical examination is negative except for the finding of such changes as are incident to his advanced age. Fluoroscopic examination gives evidence of a typical case of cardiospasm with dilatation of the esophagus associated with a left-sided diverticulum, being approximately the size of a fifty-cent piece, in the middle third of the esophagus, apparently of the traction-pulsion variety. Whether the formation of the diverticulum antedated or followed the cardiospasm is purely speculative. The writer is of the opinion that, in view of the moderate size of the diverticulum and the apparently tight cardiac sphincter, as evidenced upon fluoroscopic examination, the symptoms in this case are produced mainly by the cardiospasm. Stretching of the cardia, which will



be instituted promptly in this case, will determine to what degree the symptomatology can be referred to the diverticular pouch in question.

The writer begs the indulgence of the reader for digressing to say that it has been his practice to give two or more dilatations for cardiospasm at approximately two weeks intervals, (using the dilator devised by him and described in the April issue of The Wisconsin Medical Journal) commencing with an approximate dilatation of sixty French (Char.) at the first sitting and following this later with ninety French (Char.), depending upon and being guided by the tightness of the cardiac sphincter. The writer considers this a safer procedure in place of one wide dilatation. When it is considered that these patients usually have a history of symptoms dating back many years, it is reasonable to suppose that it is not disadvantageous to dilate to a lesser degree than customarily employed, i.e., within the realm of safety and then repeat to wider stretchings if necessary.

The writer also wishes to call attention to a new method he has employed recently to facilitate the passage of a silk cord into the stomach and intestines. Those, who have

had considerable occasion to do esophageal dilatation, know of the chagrin and annoyance of waiting for the silk cord to anchor in the intestinal tract. Smithies likewise calls attention to this fact. In speaking of Cardiospasm,[5] the latter author has this to say: "Even in long-established, obstinate cardiospasm it is generally possible for a silk cord guide to pass from the esophagus into the stomach, but at times the cord may be held in the esophagus several days and may pass freely only when spasmodic contracture of the cardia has been minimized by the free use of atropin or belladonna. However, unless the dilated esophagus be washed clean of retention contents, silk cords may lie for weeks without passing from the gullet to the stomach."

To circumvent this difficulty, the writer has employed the method of attaching securely a small non-metallic collar button (preferably of the pearl type) to the end of the silk cord to be swallowed. The weight of the button is sufficient to prevent suspension of the silk cord in the retained esophageal contents, gravity carrying the button down to the mouth of the cardiac ring, where, at the first opportunity, it will slip into the stomach. This organ will carry the button rapidly onward to be anchored in the small intestine as evidenced by the taughtness of the silk cord. This method has been tested by the writer in a sufficient number of cases to warrant the statement that it will hurry the downward course of the silk thread by hours or even days.

In the accompanying skiagram of patient N. B., the cardiospasm is in evidence at area "A" with the dilatation of the esophagus immediately above. Arrows point to the diverticular pouch.

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Liver Notch Adhesions Following Cholecystectomy; Case Reports

By W. J. TUCKER, M. D.,
Ashland

The following case reports are interesting as illustrating the consequences of liver notch adhesions following cholecystectomy. The generally accepted practice today is to remove the gall bladder in the presence of inflammation and stones where such a procedure does not unduly increase the risk. While such technique has been followed by very satisfactory results in the majority of cases, still, unless certain precautions are observed, poor results may follow. The following two cases will explain:

Case 1. Woman age 40. Cholecystectomy and appendectomy for chronic cholecystitis with stones in 1927. Relief of symptoms for one year. Then began a train of symptoms typical of duodenal ulcer pain two hours after meals with food relief, soda relief and by vomiting. Gastric analysis 60 per cent total acidity, 40 per cent free acidity, with no lactic acid or blood or mucus. X-ray showed a duodenal ulcer. At operation duodenum and pylorus were found buried in a mass of adhesions and firmly attached to the liver notch from which the gall bladder had been removed. Thorough exploration revealed no ulcer. Liver notch raw surface was covered with fat from gastro hepatic omentum and round ligament used to close off the area. Complete relief following operation, a relief that has persisted for three years.

Case 2. Man age 45. Cholecystectomy for stones in 1921. Relief for two years. Then symptoms began of pain two hours after meals. Relief by food, by alkalies and by vomiting. Passed dark stool following fainting spell in 1925. Indifferent relief from dietary management and by medication. Gastric analysis revealed 80 per cent total acidity and 50 per cent free acidity, no blood or mucus. X-ray showed a typical cap deformity. Operation advised for duodenal ulcer. At operation dense adhesions to liver notch of duodenum and pylorus were found. No ulcer of either stomach or duodenum could be found on thorough exploration, the

pylorus being split to permit a more complete investigation. The liver notch was filled in with fat from gastro hepatic omentum and the round ligament used as a curtain to wall off the stomach and duodenum. The pyloric incision was sewed up transversely to enlarge the opening. At the present writing four years later, patient has been completely relieved of all symptoms. The most satisfactory technique when possible is the removal of the gall bladder from below upward. After isolation of the ducts and artery it permits of dissection in a dry field, permits of suturing the liver notch as the gall bladder is dissected away. As an additional precaution where sufficient peritoneum is not found to accurately cover the surface, fat from the gastrohepatic omentum with the round ligament of the liver can be used as an apron to wall off the stomach, duodenum and colon from becoming adherent.

A little care as to these details may prevent some of the annoying postoperative sequelae to an otherwise perfect cholecystectomy.

Play Safe—Use Diagnostic Aids!

By A. A. PLEYTE, M. D.,
and
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Milwaukee

That the number of correct diagnoses of pulmonary tuberculosis is in direct proportion to the number of diagnostic methods employed, is the conclusion reached after a comparison of nine studies on the utilization of various diagnostic aids. These studies were made over a period of twenty-two years, the first seven between 1906 and 1915, and the last two in 1927 and 1928.

While each study was made to determine prevailing trends in the diagnosis of tuberculosis, the authors pursued individual methods and various courses to reach their conclusions. Each classification in the summary, therefore, includes only those studies in which the items considered are fairly comparable.

All of the authors—physicians primarily interested in tuberculosis—maintain that the three most important aids in the diagnosis of tuberculosis are a thorough physical examination, sputum examinations, and a temperature record. Since the first seven studies were made, the x-ray has become equally important in the diagnosis. The following chart indicates to what extent these methods have been used by physicians in general practice in the studies considered.

The term "physical examination" is too broad, as used by most of the authors, to permit fair comparison. The above figures would tend to indicate that conditions now are very much inferior to those of fifteen years ago. On the contrary, there is a distinct improvement, considering the fact that the 72% includes only bare chest examinations made by the first physician consulted. In the earlier studies the percentages include not only a large number of examinations made through clothing, but are not limited to the first physician or even the second or third in many instances. The fact remains, however, that of the seventeen hundred patients studied within the last two or three years, one-fifth to one-quarter of them were not given the benefit of a thorough physical examination when they first consulted a physician.

All cases in which there were one or more sputum examinations at any time before admission to a sanatorium are included in the percentages given in that classification. While the figures vary considerably, it is quite evident that this diagnostic aid is being used to a greater extent than formerly.

There is a marked improvement, also, in the number of patients of whom a temperature record of some sort has been kept by or at the request of a physician.

The figures on the use of the x-ray are most encouraging, considering the fact that it is not as accessible to the average physician as the other diagnostic aids.

It is generally agreed that unless there is definite proof to the contrary, pulmonary hemorrhage indicates tuberculous activity.

Study	1 Physical Exam.	2 Sputum Exam.	3 Temp. Record	4 X-ray	5 Wt. Record	6 First 3—	7 None
	%	%	%	%	%	%	%
Laverson, (1913)	69.6	6.0	21.1			2	13.8
Dearholt-Cheadle, (1914)	85.3	41.2	11.5				
Ford, (1907–14)	87.0	27.7	13.4			7	10.2
Chapman, (1927)	81.0	81.0	47.0	62.0			
Williams-Hill, (1928)	72.0	67.0	39.0	62.8	22.0		

In spite of this fact, tuberculosis was not diagnosed in about 44% of cases in which hemorrhage occurred, as brought out in some of the earlier studies.

The symptoms for which patients consulted physicians have been very similar throughout the studies in which the subject was considered. Cough, fatigue and pain in the chest have been listed most frequently.

The average delay in consulting a physician after the appearance of the first symptoms is estimated by Barnes (1906–7) to be 7.9 months. The Dearholt-Cheadle study gives the estimated average as 2 months and 29 days. The first Hawes II study (1911) gives the following tabulation: 83.6% at once; 2.8% one month or less; 13.6% more than one month. The Chapman study (1927): 61.0% within one month; 23.0% one and one-half to six months; 8.0% six months to one year; 8.0% one to twenty-five years.

As symptoms of tuberculosis are often of an indefinite character at first, it is difficult to determine with any degree of accuracy just how long the condition has been active before the patient consults the physician. The figures would indicate, however, that the extensive educational campaign stressing early diagnosis may have had the desired effect upon the general public.

CONCLUSION

Although the fact remains that tuberculosis is still being incorrectly diagnosed in far too many instances and far too few cases are being discovered while the disease is in the incipient stage, on the whole, the recent studies show a definite trend toward improvement. The proportion of incipient cases entering sanatoria is today very little higher than it was twenty years ago. However, there are two factors to be considered in this connection; in the first place, the classification has changed somewhat, and in the second place, there is a very marked improvement in the number of incipient cases being diagnosed without a positive sputum.

The authors agree that it is often extremely difficult to diagnose tuberculosis, and their criticisms lie not in the mistaken diagnoses as such, but in the failure of examining physicians to avail themselves of all the diagnostic aids at their disposal.

TUBERCULOSIS and OTHER CHEST CONDITIONS

"Give the Grass a Chance"

By F. I. DRAKE, M. D.,
Milwaukee

A paragraph in *Better Homes and Gardens* suggests that the sign "Keep Off the Grass" be changed to read "Give the Grass a Chance." In other words, give Nature a chance to heal the wounds inflicted by the tread of many feet.

The natural tendency of any case of sickness is toward recovery. It is a part of the struggle for existence and I venture to say that a majority of the cases of sickness would recover spontaneously if Nature were given a chance.

Nature is always kind. She always throws out signals of distress when the human motor is weakening. Moreover, she points the manner and the method by which repair is to take place, and he is the wise physician who correctly interprets

those signals and lends a helping hand accordingly.

Fever was once looked upon as an ominous symptom to be combated by a liberal display of drugs to keep the temperature as close as possible to the normal range. Blood letting, too, in early days was an accepted manner of reducing temperature. Then we were oblivious to the fact that a rise of temperature was merely a response to the influence of toxins on the thermal center. Physicians now take the stand that, unless the fever is in itself a menace to life, or unless it adds to the discomfort of the patient, interference should not take place.

One of the earliest symptoms of tuberculosis is fatigue. If we correctly interpret this signal of distress, we will follow Nature's method of overcoming fatigue by putting our patient completely at rest. The work of the vital organs, the heart and the lungs especially, is reduced to the minimum, and Nature has a better chance to restore the lungs to their normal function. A broken bone or a flesh wound heals more promptly under conditions of rest than under conditions of activity.

Rest of the mind as well as of the body promotes recovery. Mental activity increases the action of the heart. This, in turn, increases the activity of the lungs and retards the healing process. Probably one of the strongest reasons why a patient cannot take the cure at home to the same advantage that he can at a sanatorium is the fact that planning for the next day's work, family jars, family worries rob the tuberculous patient of that tranquility of mind which goes so far to promote and hasten the curing process.

One of the perennial problems of our sanatorium superintendents is the question of patients' vacations, especially on our national and religious holidays. It has been observed repeatedly that patients who leave the sanatorium on these occasions for an absence of a few days only, often resume treatment with all their symptoms aggravated, and weeks and months are sometimes required to regain the ground lost just for a few days of pleasure with relatives and friends. The excitement incident to meeting old acquaintances, the loss of sleep and rest, breaks down quickly all that has been gained by weeks and months of careful cure-taking.

If we would give the grass a chance, if we would correctly interpret Nature's call of distress, if we would listen to the tuberculosis S.O.S. and lend a hand, we will give our patient complete mental and physical rest, that he may have life and "have it more abundantly."

The Old Country Doctor

By Frank Carleton Nelson

When word of the fiftieth wedding anniversary of Dr. and Mrs. George Young of Elkhorn, Wis., reached Auburn, Ind., in the news dispatches this Hoosier poet promptly mailed his poem to Dr. and Mrs. Young. He writes:

"I am sending to you inclosed and dedicated to you my poem, 'The Old Country Doctor.' I know of no one to whom I could dedicate this poem more fittingly, for, without doubt, you are the man I tried to picture when I wrote the verses."

Could I scribble a toast in a suitable way,
With a meter all balanced and true,
I would write of the man I am thinking today,
And pay him a tribute that's due;
Could I picture the past that appears in a dream,
As I fill up my glass to the brim,
The "Old Country Doctor" I'd choose as my theme,
And I'd write my best poem to him.

I would sip of my wine, home made though it be,
And drift to the long, long ago,
And picture in words, so the whole world could see
The doctor we all used to know,
The man who would drive in the dead of the night,
Through blizzard and snowstorm and rain,
And fight against odds as a hero would fight,
To case some poor mortal from pain.

In one little verse I would journey far back
And sketch him in deepest despair,
In a cold, barren room, in a tumbled down shack,
As he sits on an old kitchen chair
By the side of a cot that the angels surround
To bear a poor mother away,
And there in my verses these words would be found,
"He labored for love and not pay."

No, it wasn't the money he got for it all;
It wasn't the wealth he acquired;
From somewhere above he had heard the great call,
And the heart of a hero was fired,
And under this picture of mine I would add,
Embellished, if heaven be fair,
Regardless of failings and faults that he had,
The Old Country Doctor is there.

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EDITORIALS

ETHICS, AGAIN

THE question of "Ethics" is attracting general attention, as may be seen in a London letter dated July 13, 1929 in which, during a litigation, the suggestion was made that the physician defendant performed a series of dangerous, unnecessary operations "in order to put fees into his pocket," and in a Paris letter of July 3, 1929, one learns that the Academy of Medicine has decided to take part in the organization of an "Ethical order of Physicians."

In this country, at the recent meeting of the A.M.A., the House of Delegates adopted a new wording of that section of the Code of Ethics referring to the subject of fee-splitting which, to say the least, is inclusive and explicit and it is to be hoped that its letter and spirit will be followed more generally than was the older wording.

To many physicians, perhaps most, there seems to be no more reason for inserting this section than for inserting one or all of the "Ten Commandments." The mere fact that such a section is deemed necessary is a rather sad commentary upon the medical profession and leads to many conclusions; one of which is, that despite four years of collegiate pre-medical training, a four year medical course and other requirements for graduation, the more desirable students do not seem to be attracted to the practice of medicine, as it is being practiced.

Many medical students receive their degree with no idea as to the economic and ethical questions concerning the actual *practice* of medicine in contradistinction to the *study* of medicine.

Medical ethics should not be taken for granted but should be instilled into the heart and mind of students early in their course of study so that, if such ethical principles are found to be incompatible with other principles of the particular individual, a change to a more suitable calling may be made without unreasonable loss of valuable time.

We are told that ethics, morals, standards and customs, change with changing conditions, circumstances and environments; that morals are but good manners and good taste, and are consequently subject to modes and fashions.

This is, of course, true: in business, in art, in literature and in drama; but does not hold true regarding facts. That two and two is four persists despite changes in fashion, climate or government; and gravitation still gravitates despite even the aeroplane.

The necessity for ethics may be great, or they may be uncalled for. The ethics of accepting a tip need not bother a shoe black, chauffeur, waiter or barber; commissions in business may or may not be considered from an ethical standpoint, but in the practice of medicine, which concerns life and health, ethics must be of the highest order, on a professional basis, i.e., that the patient's interest is paramount, in contradistinction

to a business basis in which "caveat emptor" (let the buyer beware) is the guiding principle.

The old fashioned medical Code of Ethics is often laughed at, or even sneered at, by nonmedical individuals, but the reason for perpetuation of an unmodified ethical code is that this concerns not business, nor art, literature, or drama, but concerns life and death: and the demand for its enforcement should come, not from the profession, but from those more vitally concerned, the patients.

When the merchant realizes the fact that a commission for a sale in "clucks and suits" is different from a commission for a surgical operation or medical management, that may be life saving, or life endangering, then will there be a solution to the question of "fee splitting". F. G. C.

IMMUNIZATION AGAINST DIPHTHERIA

THE vital statistic records of the Wisconsin State Board of Health show 98 deaths from diphtheria in the year 1928 as against an average of about 300 annually for the decade 1916 to 1925. For a long time it was frequently pointed out that the death rate from diphtheria had been steadily falling since the advent of antitoxin but that the case rate had not kept pace with the decline in mortality. The statistics of the Wisconsin State Board of Health for the years 1916 to 1925 show the average number of cases of diphtheria reported to that board to have been about 3,000. The report for the year 1926 shows 2,054 cases, for 1927 the record shows 1,862 cases, and for 1928 there were 1,155 cases reported. In other words, the statistics now record a marked decline in cases as well as deaths.

There are no new factors of late years bearing upon the diphtheria situation except immunization by toxin-antitoxin or toxoid, and the declining rates must be laid to the advent of these biologicals. Many children in Wisconsin have already received toxin-antitoxin but by far the greater proportion have not had its benefits. This is particularly true of the infants prior to school age who are hard to reach except through the family doctor. The mortality among small children is high in proportion to the number of cases, and every child of nine months and beyond should be immunized. Unidentified diphtheria carriers always exist in the population and the steady occurrence of diphtheria without known exposure, even in sparsely settled districts, may be laid largely to such carriers. Diphtheria has its dreads for both family and physician alike, and the best form of safety insurance for any child is diphtheria immunization. C. A. H.

A NEW ERA IN MEDICINE?

PHYSICIANS attending the recent clinical congress of the American College of Surgeons heard a straight from the shoulder warning by President Glenn Frank of the University of Wisconsin that they must either adjust themselves to a new era of preventive medicine or find themselves out in the cold.

This new era is foreseen by the educator as the inevitable outcome of the huge annual waste caused by disease and ill health. Economic pressure, he believes, will work through the intelligent self interest of industry and the growing enlightenment of labor leadership to bring about a vast system of state or corporation medicine unless physicians themselves take the lead in fulfilling medical needs.

It is true, as Dr. Frank points out, that neither private companies nor the public will be concerned, in any health programs they may devise, with the effect of their actions on the private practice of medicine.

Leaders of the medical profession will do well to face the facts. If $1,800,000,000 is our annual bill for sickness and if preventive medicine is capable of cutting from this bill more than $1,000,000,000 and returning it to the pockets of the great mass of working people who have been footing it, this country is going to have preventive medicine. The growing tendency toward the retaining of doctors as health advisers offers to private practitioners an opportunity of salvation which they ought to grasp before the way is preempted by public or corporate enterprise.

—Editorial, MILWAUKEE SENTINEL, Oct. 21, 1929.

THE PRESIDENT'S PAGE

F. J. Gaenslen

COMMUNITY HEALTH

IN MY address as president of the state society the subject of Preventive Medicine was chosen because of its appeal to the profession as a whole. It was pointed out that this subject was of interest not only to the general practitioner but to those engaged to the specialties as well. It will be my purpose to use this page during the current year to stress Preventive Medicine and to point out its relations to general medicine and in the specialties. No phase of our professional work can be more productive of results from the standpoint of community health or more gratifying when the results of our efforts are reflected in the mortality statistics and records of the incidence of preventible disease. Certainly our obligations as physicians will be fulfilled on a broader scale and in a higher degree than would result from attention to any other one phase.

In discussing the subject some months ago with a physician in a small community, one of eleven hundred people, it was learned that this physician some years ago on his own initiative inaugurated a campaign of Preventive Medicine which could well serve as a model for us all perhaps in some modified form. In the first year of his campaign he paid special attention to the prevention of goiter. The parents were informed of the essential facts in talks before parents' and teachers' meetings, through the local newspapers, and in personal letters to the parents from the principal of the school. In addition, talks were given in the higher grades and in the high school by the principal or by the teachers. While some objectors were found, within three years every child under sixteen in his community was receiving proper preventive therapy. In the second year he stressed toxin antitoxin treatment for the prevention of diphtheria and vaccination against small pox. In his experience the objectors gradually dwindled to practically zero, the great majority of parents wishing their children to have the preventive measures advocated, without questioning. While in this case the school board furnished and paid for materials used the physician did the work without compensation. This to me does not seem indicated. Certainly the majority of parents are able to pay for services, but where there is a question patients may be given the benefit of the doubt, if for no other reason than the protection of other children attending school. There can be no question that advantage is taken of facilities by the undeserving and in educational talks this should be condemned, at the same time giving assurance that services are gladly extended to those in need. In this particular instance the physician, while fixing his attention in a given year on some particular phase of prevention, no efforts were spared in his daily contact with families to give proper guidance in whatever health matters presented themselves.

In contrast to the above the following may be of interest. In a community of five hundred there was an active demand for the protection of school children against diphtheria. Funds were available for the necessary material, also for compensation for individual services, but the difficulty was in finding a physician to do the work. The suggestion that nurses be entrusted with this work was wisely and properly declined. While local conditions may have justified the physicians in declining to undertake the work the situation is to be deplored because the work must and will be done, if not by local physicians then by physicians sent by the State Board of Health as the problem clearly involves public welfare.

Situations such as the latter smooth the way for state medicine by preparing the public to look to the state more and more in matters of health. To our way of thinking, community health should find its chief supporters in the medical profession. The control is still in our hands, but forfeiture is not far distant, unless we measure up to our responsibilities in a broad and generous spirit.

THE STATE MEDICAL SOCIETY OF WISCONSIN

ORGANIZED 1841

Officers, 1929

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Barron-Polk-Washburn-Sawyer-Burnett	J. A. Diamond, Frederic	S. R. Medley, Shell Lake.
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Dodge	L. M. Bachhuber, Mayville	A. A. Hoyer, Beaver Dam.
Door	John Hirschboeck, Forestville	T. C. Proctor, Sturgeon Bay.
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Green Lake-Waushara-Adams	C. U. Senn, Ripon	A. J. Wiesender, Berlin.
Iowa	A. D. Brown, Mineral Point	M. W. Trentzsch, Highland.
Jefferson	E. W. Bowen, Watertown	M. G. Peterson, Lake Mills.
Juneau	C. A. Vogel, Elroy	A. T. Gregory, Mauston.
Kenosha	H. A. Binnie, Kenosha	Margaret Pirsch, Kenosha.
La Crosse	N. P. Anderson, La Crosse	J. E. Heraty, La Crosse.
Lafayette	W. W. Peck, Darlington	S. A. J. Ennis, Shullsburg.
Langlade	P. J. Dailey, Elcho	J. C. Wright, Antigo.
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Manitowoc	J. E. Meany, Manitowoc	A. P. Zlatnik, Two Rivers.
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Marinette-Florence	T. J. Redelings, Marinette	M. D. Bird, Marinette.
Milwaukee	H. J. Gramling, Milwaukee	E. L. Tharinger, Milwaukee.
Monroe	J. M. Scantleton, Sparta	H. H. Williams, Sparta.
Oconto	R. J. Goggins, Oconto Falls	G. W. Krahn, Oconto Falls.
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Sheboygan	C. J. Weber, Sheboygan	R. L. Zaegel, Sheboygan.
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Waupaca	T. E. Loope, Iola	A. M. Christofferson, Waupaca.
Winnebago	D. J. Ryan, Neenah	W. N. Linn, Oshkosh.
Wood	D. Waters, Wisconsin Rapids	W. G. Sexton, Marshfield.

SOCIETY PROCEEDINGS

BROWN–KEWAUNEE

The Brown–Kewaunee County Medical Society held its first fall meeting at Stangleville on September, the 23rd, where a fried chicken dinner was served. Dr. R. M. Carter, Green Bay, read a paper on "Injection and Treatment of Varicose Veins."

A discussion was taken up by several members of the society on the subject of raising the state dues from $10 to $15. The general opinion did not seem to favor. There was an attendance of thirty members.

The next meeting will be held in Green Bay. Dr. Harold Marsh, Jackson Clinic, Madison, will read a paper on "Diagnosis and Treatment of Cardiac Lesions" and Dr. Arnold S. Jackson will speak on "Spinal Anesthesia", illustrated by lantern slides. Members from the surrounding medical societies will be invited to this meeting. M. H. F.

CRAWFORD

The annual meeting of the Crawford County Medical Society was held at the Court House, Prairie du Chien, on Wednesday, October 16th, following a chicken dinner at high noon. The guest of the society was State Secretary Crownhart, who was present to assist the local membership in celebrating the election of Dr. A. J. McDowell, Soldiers Grove, as president-elect of the State Society. Mr. Crownhart's address was an inspiration, full of very interesting information and the members voted unanimously to instruct their delegate to favor the suggested increased activities of the Society.

The following officers were elected for the ensuing year: Dr. W. T. Pinkerton, Prairie du Chien, president; Dr. A. E. Dillman, Steuben, vice president; Dr. O. E. Satter, Prairie du Chien, delegate; Dr. T. E. Farrell, Seneca, alternate; Dr. C. A. Armstrong, Prairie du Chien, secretary–treasurer.

C. A. A.

GRANT

Members of the Grant County Medical Society met at the Court House at Lancaster on Tuesday afternoon, October 16th. Mr. J. G. Crownhart, secretary of the State Medical Society, presented in some detail the problem confronting the Society as to its future activities and policies. A general discussion followed Mr. Crownhart's presentation after which the members voted unanimously to instruct their delegate to favor the suggested increased activities of the Society. County Judge Brennan discussed in detail a position of the county judge with reference to indigent patients and an interesting discussion followed. Dr. E. H. Lechtenberg and Dr. L. J. Unterholzner were elected to membership.

Officers for the coming year will be: President, Dr. E. H. Spiegelberg, Boscobel; vice president, Dr. H. J. McLaughlin, Bloomington; secretary, Dr. M. B. Glasier, Bloomington; censor, Dr. F. E. Blackburn, Cassville; delegate, Dr. J. C. Betz, Boscobel; alternate, Dr. G. E. Buck, Platteville. The meeting adjourned at six p. m. M. B. G.

JEFFERSON

Dr. Carl Henry Davis, Milwaukee, gave an illustrated address on "Obstetrical Problems" before the Jefferson County Medical Society at the Black Hawk Hotel, Fort Atkinson, on Thursday, October 17th. A discussion on the proposed increase in dues for 1931 was conducted by Mr. George Crownhart, state secretary. M. G. P.

KENOSHA

Two interesting and educational addresses, illustrated by lantern slides, and a report of the state meeting featured the regular meeting of the Kenosha County Medical Society, held Monday evening, September 30th, at the Elks Club. Dr. E. J. Carey, professor of anatomy at Marquette University School of Medicine, spoke on "The Development of Bone," and Dr. F. D. Murphy, professor of medicine at Marquette University, talked on "Chronic Glomerulonephritis." Dr. George F. Adams, Kenosha, delegate from the society to the state meeting spoke on the highlights of the convention.

LA CROSSE

The regular meeting of the La Crosse County Medical Society was held in Pioneer Hall, September 30th. The meeting was called to order by the president, Dr. N. P. Anderson. Dr. W. E. Bannen gave a very complete report on the A. M. A. meeting held at Portland. A few remarks about this meeting were also made by Dr. Houck and Dr. Anderson. A report of the State Medical Society meeting at Madison was given by Dr. G. Gundersen, La Crosse, and Dr. Spencer Beebe, Sparta.

Dr. Smedal made a motion, seconded by Dr. Rosholt, that either Secretary Crownhart or President Gaenslen be invited to discuss the advisability of increasing the state dues from ten to fifteen dollars. Motion carried. Dr. A. Gundersen made a motion, seconded by Dr. G. Gundersen, that the School for Crippled Children be cared for by the county physician. Motion carried. An invitation was extended to the La Crosse County Medical Society to attend the state meeting of the Urological Society to be held in La Crosse on October 7th.

The October meeting of the society was held on October 15th when Dr. W. P. Brown of the Mayo Clinic, Rochester, gave an instructive paper on "Interesting Bowel Conditions."

Dr. Robert E. Flynn made a motion, seconded by Dr. Bannen, which was carried, that a committee wait on the city council of La Crosse, and present

to them the proposition of more liberal parking time for physicians in the streets and highways about the city. The chairman named Drs. R. E. Flynn, W. E. Bannen, H. E. Wolf, W. J. Jones, and G. Gundersen on this committee to report at the next meeting.

There was discussion of state increase of dues. Motion was made to have the program committee invite the secretary, George Crownhart, for a future meeting. J. E. H.

MARATHON

Dr. A. L. Tormey, Madison, read a paper on "Infections of the Hand" at the monthly meeting of the Marathon County Medical Society held Wednesday evening, September 25th, at the Wausau Memorial Hospital.

On Wednesday evening, October 9th, the society met at St. Mary's Hospital when two physicians from the Jackson Clinic, Madison, presented papers. Dr. George H. Ewell spoke on "Management of Chronic Urinary Infections" and Dr. R. B. Stout discussed "Spinal Anesthesia."

MARINETTE–FLORENCE

The Marinette–Florence County Medical Society held its monthly meeting on Thursday evening, September 26th. Reports of the activities of the recent state meeting at Madison were presented by Dr. T. J. Redelings, councilor, and Dr. G. R. Duer, delegate. A six o'clock dinner was served at the "Green Mill." M. D. B.

MILWAUKEE

Members of the Milwaukee County Medical Society met at the Medical Arts Building on Friday, October 11th. The following program was presented: "The Treatment of Old Ununited Fractures of the Neck of the Femur" by Dr. John W. Powers; a motion picture film demonstrating a modification of the Whitman reconstruction operation, showing the various steps in the operation, and details of post-operative treatment and exhibiting post-operative results; "Presentation of Four Cases of Rabies in Man" by Dr. Samuel J. Hoffman, Cook County Hospital, Chicago; "The Importance of Diagnosis in Rectal Conditions" by Dr. Jerome M. Lynch, New York City.

OUTAGAMIE

Pointing out that there are 350 known cases of tuberculosis in Outagamie County and probably many more undiscovered cases, Dr. C. C. Boyd, superintendent of Riverview Sanatorium, Little Chute, discussed the early symptoms of the disease at a meeting of the Outagamie County Medical Society held at Riverview on Thursday evening, September 26th. Dr. A. A. Pleyte of the Wisconsin Anti-Tuberculosis Association spoke on "Early Diagnosis of Tuberculosis in Children;" Dr. E. F. McGrath discussed "X-Ray Diagnosis of Tuberculosis in Children," and Dr. Victor F. Marshall submitted a report on the state meeting at Madison. A ball game preceded the dinner given by Dr. C. C. Boyd and other officials at the sanatorium.

PIERCE–ST. CROIX

Twenty members of the Pierce–St. Croix County Medical Society met at Spring Valley Thursday evening, September 19th. Following a six-thirty supper at Community Hall, Dr. A. R. Tormey, Madison, discussed "Infections of the Hand."

ROCK

Dr. J. C. Sargent, Milwaukee urologist, presented an interesting paper on "Stones in the Kidney" before the Rock County Medical Society on Tuesday evening, September 24th. Dr. F. B. Farnsworth, Janesville, presided at the meeting following the dinner. The district meeting to be held in Madison this fall was under discussion.

TREMPEALEAU–JACKSON–BUFFALO

The Trempealeau–Jackson–Buffalo County Medical Society held its annual meeting at Arcadia on October 10th. Dr. Spencer Beebe, district councilor, discussed the use of the cystoscope and gave demonstration of passing ureteral catheters. Dr. C. P. Peterson presented the report of the meeting of the State Society.

The following officers were elected for 1930: Dr. F. T. Weber, president; Dr. J. W. Lowe, vice president; Dr. R. L. MacCornack, secretary–treasurer; Dr. C. F. Peterson, delegate; Dr. H. A. Jegi, alternate, and Dr. J. W. Lowe, censor. R. L. M.

VERNON

At a meeting of the Vernon County Medical Society held at Viroqua on Wednesday, October 16th, the following officers were elected for the year 1930: President, Dr. C. H. Trowbridge; vice president, Dr. W. M. Trowbridge; secretary, Dr. W. H. Remer; treasurer, Dr. C. E. Lauder; delegate to state meeting, Dr. C. E. Lauder, and alternate, Dr. R. H. Ludden.

A resolution to commemorate the death of our former president, Dr. H. J. Suttle, was adopted upon motion. Another resolution endorsing the proposed building of Vernon County Memorial Hospital in the city of Viroqua was also adopted. W. H. R.

WASHINGTON–OZAUKEE

The members of the Washington–Ozaukee County Medical Society met at West Bend on Friday evening, October 11th. The following scientific program was presented: "Foot Troubles" by Dr. John Powers, professor of orthopedic surgery, Marquette University; "The Evaluation of Urinary Symptoms" by Dr. James Sargent, professor of genito-urinary surgery, Marquette University. At the business session, the society's delegate to the state meeting presented his report and officers for the ensuing year were elected.

P. M. K.

WAUKESHA

Dr. William J. Carson, Milwaukee, read a paper entitled "Urogenital Infections" before the Waukesha County Medical Society, held on Monday, October 2nd.

WINNEBAGO

The members of the Winnebago County Medical Society met on Friday, October 25th, at the home of Dr. George V. Lynch, Oshkosh. Dr. John Schneider described his journey through Scotland, England, Germany and Austria, and George Crownhart, state secretary, spoke on "Future Activities of the State Society." By unanimous vote the society favored suggested expansion in the work of the State Society. W. N. L.

MILWAUKEE ACADEMY

An interesting program was arranged for the meeting of the Milwaukee Academy of Medicine on October 22nd. Dr. E. J. Oesterlin spoke on "Carcinosarcoma of Thyroid with Pathological Material," and Dr. A. C. Ivy, professor of physiology, Northwestern University, discussed "The Mechanics of Digestion with Special Reference to Bile Flow."

The following letter has been sent to members of the Academy on the life membership and the endowment fund:

The history of the Milwaukee Academy of Medicine shows that for over forty years there were always dreamers who strove to stimulate and encourage their fellow members to greater accomplishments. In spite of constant handicaps the library grew and the programs presented many new ideas in medicine. More often than not the Program Committee has had to contribute and to collect the money necessary to bring speakers from distant points because the current income never has been sufficient for all the needs.

Four years ago our beloved member, the late Doctor Ernst Copeland, gave us his equity in the building we now occupy. This gift is variously estimated to have a value of from $55,000 to $75,000. At the same time Doctor Arthur W. Rogers gave $5,000 for additions to the library. This summer Mrs. Louise Schneider Marshall has given $5,000 in memory of her distinguished father, the late Doctor Joseph Schneider. Last winter, upon the death of Doctor Horace Manchester Brown, we inherited his valuable library and $1,000. Thus for the first time in our career we have an excellent start toward financial independence.

The purpose of the present Endowment Fund Campaign is primarily to raise, in addition, a sufficient amount to endow the Academy in perpetuity and to assure an income, besides the annual dues, commensurate with the highest ideals of service to members, to physicians of the community and the state in general and to the public whose physical welfare depends upon our efforts to keep abreast with the ever-extending knowledge and new developments in medicine. In other words, with a larger income, the Academy can add to its library both books and journals which are essential for study and research; it can bring to its meetings the foremost lectures and teachers in each and every specialty; and why not even clinical demonstrations by eminent physicians, thus furnishing post-graduate instruction without costly travel.

It seems to your Council that every member should be interested in this project and should be glad to help as he may be able, in order to meet the offer of the lay members of our Board of Trustees to undertake to raise an additional $65,000 for our Endowment Fund, provided we subscribe $35,000 in the form of life memberships at the rate of $500 each. Furthermore, your Council feels sure that you all are anxious to take advantage of the offer made by Mr. Edward Sisson Brown, New Bedford, Massachusetts, to give to the Academy $10,000 as a memorial to his brother, Doctor H. M. Brown, and for the purpose of adequately housing and servicing the Brown Library, provided a similar amount is contributed by members and friends of the Academy on or before December 31, 1929.

According to the plans of the Council and the board of Trustees, the Endowment Fund will not be invested either directly or indirectly in any building project, but shall be treated as a "trust fund" in the strictest sense of these words.

Thus far, through the efforts of Roland Cron, Chairman of the Life Membership Committee, G. A. Carhart, C. A. Evans, J. P. McMahon, A. J. Patek, and others, subscriptions for Full Life memberships had, on Oct. 18th, been received from the following members:

Beebe, C. S.	Lotz, Oscar
Blumenthal, R. W.	Madison, J. D.
Boorse, Lorenz	McGovern, J. J.
Brown, S. V. I.	McMahon, J. P.
Carhart, G. A.	Munkwitz, Frank
Cron, R. S.	Murphy, Francis
Davis, C. H.	O'Malley, T. S.
Eberbach, Carl	Patek, A. J.
Egan, W. J.	Powers, H. W.
Evans, C. A.	Quick, Edward
Federspiel, M. N.	Roethke, R. W.
Fellman, G. H.	Schumm, H. C.
Foerster, O. H.	Seaman, G. E.
Foerster, H. R.	Seeger, S. J.
Gaenslen, F. J.	Senn, Ulrich
Gordon, F. S.	Shutter, H. W.
Gray, A. W.	Sivyer, A. W.
Grove, W. E.	Sleyster, Rock
Grotjan, W. F.	Sproule, Ralph
Henes, Edwin, Jr.	Squier, T. L
Hitz, H. B.	Szlapka, T. L.
Jermain, Louis	Tharinger, E. L.
Jermain, Wm.	Thorndike, Wm.
Johnson, Arthur	Warfield, L. M.
Kastner, A. L.	Washburn, R. G.
Kradwell, W. T.	Yaffe, Aaron
LeCron, W. L.	Yates, J. L.

The total amount subscribed for Life Memberships is $27,000.

Subscriptions have been received for partially paid Life Memberships from members as follows:

Armbruster, B. F.	Higgins, S. G.
Bourne, N. W.	Kelly, Geo. F.
Dieterle, John O.	Kristjanson, H. T.
Gilchrist, R. T.	Merten, A. N. E.
Hall, R. M.	Pink, J. J.
Herner, Wm. L.	Podlasky, H. B.
Haessler, F. H.	Wenstrand, D. E. W.

The amount subscribed by them is $1,800.

Subscriptions to the Proposed Horace Manchester Brown Memorial have been received from seven members in the amount of $500 each, most of whom have also subscribed for Life Membership.

Davis, C. H.	Roethke, R. W.
Hitz, H. B.	Sifton, H. A.
Lillie, O. R.	Sleyster, Rock
McMahon, J. P.	

The total amount subscribed to the "Brown Fund" is $3,500.

D. E. W. W.

MILWAUKEE OTO-OPHTHALMIC

The October meeting of the Milwaukee Oto-Ophthalmic Society was held Saturday evening, October 26th, in the Milwaukee Academy building. Dr. Meyer Wiener, St. Louis, Mo., presented a paper on "Some Points in the Technique of Ophthalmic Surgery," with lantern slide demonstration. E. R. R.

MILWAUKEE PEDIATRIC

The Milwaukee Pediatric Society held its fourth meeting of 1929 at the Milwaukee Children's Hospital at eight p. m., on Wednesday, October 9th.

Dr. Joseph Brennemann of Chicago spoke on "Observations on the Treatment of Inflammatory Conditions in Children." F. R. J.

MILWAUKEE ROENTGEN RAY

The October meeting of the Milwaukee Roentgen Ray Society was held at the Wisconsin Club on Friday, October 4th, with dinner at 6:30 followed by the scientific session at eight o'clock.

The scientific program comprised a very interesting resumé of the American X-Ray Society meeting in New York City by Dr. H. B. Podlasky and an informal talk on "Radiologic Studies of the Physiology and Pathology of Bone" by Dr. E. J. Carey.

J. E. H.

UNIVERSITY OF WISCONSIN

Dr. Leon Asher, professor of physiology, University of Bern, Switzerland, spoke on "The Physiology of the Thyroid" at the University of Wisconsin Medical Society meeting held on Wednesday, October 2nd, at the Service Memorial Institute.

A special meeting of the society was held on Friday, October 4th, when Dr. F. Verzar, professor of physiology, University of Debreczen, Hungary, addressed the gathering on "Intestinal Absorption."

SECOND DISTRICT

The annual meeting of the Second District Medical Society was held at the Racine Country Club, at Racine, Wednesday, October 9th. The morning session began promptly at ten o'clock and the afternoon meeting at two. Dr. F. J. Gaenslen, president of the State Society, addressed the members on "Back Pains and Their Treatment;" Dr. R. E. Campbell, assistant professor of obstetrics, University of Wisconsin, spoke on "Present Status of Puerperal Infection;" Dr. W. S. Middleton, professor of medicine, University of Wisconsin, discussed "Recent Therapeutic Advances." "Benign and Malignant Hypertension" was the subject of a paper presented by Dr. Frances D. Murphy, Milwaukee, and George Crownhart, state secretary, addressed the society on "Lay Organizations in Public Health Fields."

A complimentary dinner given by William Horlick, Sr., was served at twelve noon and immediately following the society held a short business meeting.

S. J.

NINTH DISTRICT

The autumn meeting of the Ninth Councilor District Medical Society was held at Marshfield on the afternoon and evening of October 10th.

A heart clinic was conducted at St. Joseph's Hospital at three o'clock and at four a pediatric clinic was held at Hotel Charles. Following a six o'clock dinner at the hotel Dr. Henry Schmitz, Chicago, spoke on "The Clinical Significance and Treatment of Benign Uterine Hemorrhages;" Dr. A. R. Barnes, Mayo Clinic, discussed "Etiologic and Pathologic Approach to the Diagnosis of Heart Disease," and Dr. J. E. Gonce, University of Wisconsin, presented a paper on "The Use of Citric Acid Milk in Artificial Feeding of Infants."

TENTH DISTRICT

Morning clinics, addresses and discussions in the afternoon and a banquet in the evening featured the Twenty-Ninth Annual Meeting of the Tenth District Medical Society, held at Eau Claire on October 10th.

The following program was presented: Morning program, dry clinics at Sacred Heart Hospital. The surgical clinic was conducted by Dr. Gatewood, Chicago; medical clinic, Dr. C. W. Hensel, St. Paul, and pediatric clinic, Dr. M. G. Peterman, Milwaukee. After luncheon the members and guests met at the Elks Club where Dr. Gatewood, Chicago, spoke on "How I would like my Ulcer Treated, Surgically and Medically;" Dr. Carl Beck, Chicago, "Surgery and Other Interesting Observations from Abroad in 1929;" Dr. C. W. Hensel, St. Paul, "Diuretics in Cardiac Disease," and Dr. M. G. Peterman, Milwaukee, "Intracranial Hemorrhage of the Newborn."

Dr. A. L. Payne and Dr. E. P. Hayes, president and secretary respectively, were again chosen as officers for the ensuing year.

WISCONSIN HEALTH OFFICERS

The Ninth Biennial Conference of the Wisconsin Health Officers was held on October 24th and 25th in the Assembly Chamber of the State Capitol, Madison. A well arranged program was presented under the auspices of the State Board of Health. It included:

Morning Session:

Registration; "Stronger Health Organizations," Dr. C. A. Harper, State Health Officer, Madison; Discussion led by Dr. G. H. Conklin, Health Officer, Superior; "Why Every County Should Have a Public Health Nurse," Mrs. E. H. Miles, member of the Jefferson County Public Health Committee, Ft. Atkinson; Discussion led by Dr. S. C. McCorkle, Health Officer, West Allis; "Influenza, Its Prevention and Control," Dr. M. R. French, Director, Communicable Disease Division, Milwaukee Health Department, Milwaukee; Discussion led by Dr. R. Schwartz, Health Officer, Chippewa Falls, and Mr. L. W. Hutchcroft, Statistician, Bureau of Vital Statistics, Madison.

Afternoon Session:

Address of Welcome, Governor Walter J. Kohler; "Importance of Law Enforcement in Health Work," Dr. E. V. Brumbaugh, Deputy Health Commissioner, Milwaukee; Discussion led by Dr. H. E. Gillette, Health Officer, Pardeeville, and Dr. R. T. A. Nixon, Health Officer, Brookfield; "Layman Health Officers," Mr. L. F. Bugbee, Health Officer, Wausau; Discussion led by Mr. A. M. Murphy, Health Officer, La Crosse, and Mr. William Keenan, Health Officer, McFarland Township; "Value of a County

Health Department," Dr. P. W. Covington, District Representative, National Health Board, Salt Lake City; Discussion led by Dr. G. Windesheim, Health Commissioner, Kenosha, and Dr. G. B. McKnight, Health Officer, Fond du Lac; "Wisconsin's Maternal and Child Welfare Program," Dr. Charlotte J. Calvert, Director, Bureau of Child Welfare; "The Work of the Public Health Nurse," Miss Cornelia Van Kooy, Director, Bureau of Public Health Nursing; Discussion led by Dr. A. J. McDowell, President-Elect, Wisconsin State Medical Society, Soldiers Grove.

Friday Morning Session:

"Sanitation in Rural Communities," Frank R. King, Bureau of Domestic Sanitary Engineering; Discussion by Prof. E. R. Jones, Department of Agricultural Engineering, University of Wisconsin, and Prof. F. W. Duffee, Department of Agricultural Engineering, University of Wisconsin; "Control of Communicable Diseases," Dr. W. W. Bauer, Commissioner of Health, Racine; Discussion led by Dr. E. T. Ridgway, Health Officer, Lafayette Township, Elkhorn; "Efficient Methods of Disinfection," Dr. W. D. Stovall, Director State Laboratories of Hygiene; General Discussion; "Making Wisconsin Safe for the Vacationer," Burt Williams, Madison; Discussion led by Dr. R. C. Rodecker, Health Officer, Mercer.

Afternoon Session:

"Toxin-Antitoxin and Vaccination Programs, with a Demonstration," Dr. F. F. Bowman, Health Officer, Madison; Discussion led by Dr. F. J. Pfeiffer, Health Officer, New London; "Constructive Health Work in Schools," O. H. Plenzke, Assistant State Superintendent of Schools, Madison; Discussion led by Miss Palma Grahn, Dane County Nurse, and Mrs. Selma Collins, Supervising Nurse, Madison Health Department; "Sanitation of School Grounds and Buildings," Dr. W. J. Miller, Deputy State Health Officer, Madison; General Discussion; Conferences with Deputies.

NEWS ITEMS AND PERSONALS

Mayor T. D. Hefko of Marshfield announced during October that Dr. K. W. Doege, president of the Marshfield Clinic and past president of the State Medical Society of Wisconsin, had offered a gift of $500 to the city of Marshfield to be used in beautifying Columbia park.

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Dr. Charlotte J. Calvert, Madison, has been assigned as acting director of the bureau of child welfare of the Wisconsin State Board of Health to succeed Dr. Cora S. Allen, now associate director of the bureau of maternity, infancy and child hygiene of the New York State Department of Health.

Dr. Calvert has been associated with the Wisconsin board for four years, serving several years as pediatrist at child health centers and for the past year in making a statewide study of maternal mortality in Wisconsin under the joint sponsorship of the State Board of Health and the State Medical Society. Dr. Calvert is a graduate of the medical school of the University of Minnesota and served her interneship at the Wisconsin General Hospital, Madison.

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Dr. John I. Chorlog, after spending two years in eastern hospitals, has joined his father, Dr. J. K. Chorlog, in the practice of medicine and surgery with offices at 301 South Pinckney St., Madison. Dr. Chorlog is a graduate of the University of Wisconsin college of letters and science in 1925 and from the medical school in 1927, being a member of the first class to be graduated from the school. He served his interneship at the Chesapeake and Ohio Railway Hospital, Clifton Forge, Va., and one year as resident physician at Gill Memorial Eye, Ear, Nose and Throat Hospital, Roanoke, Va.

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Dr. M. W. Trentzsch, who has been a practicing physician at Highland for the past twelve years has established his practice at Medford.

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After an absence of four and one-half months, most of which time was spent in Vienna in special study of the eye, ear, nose and throat, Dr. William Hipke, returned to the city of Marshfield on September 18th and resumed his professional duties at the clinic.

This is Dr. Hipke's second trip to Vienna for post graduate study, the first being taken twenty years ago just before he located in Marshfield.

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Dr. A. R. Bellerue, Iola, is pursuing a course in diseases of the eye, ear, nose and throat at Rush Medical College, Chicago. Dr. William Wilker, formerly of the Metropolitan Hospital, New York City, will have charge of Dr. Bellerue's practice during his absence.

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Dr. W. W. Bauer, city health director at Racine, attended the 56th annual meeting of the American Public Health Association held at Minneapolis September 30th to October 5th. Dr. George Ruhland, former health commissioner of Milwaukee and now associated with the city of Syracuse, N. Y., was one of the principal speakers on the program.

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Dr. John L. Garvey, former associate professor of neurology, University of Michigan, has taken over of the practice of the late Dr. B. B. Rowley at 508 Colby-Abbott Bldg., Milwaukee. Dr. Garvey will limit his practice to neurology.

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Carl Franck, Milwaukee, who is a molder during the day and poses as a doctor after hours, was fined $100 in district court on October 9th on a charge of practicing medicine without a license. The complainant was Walter Drews, investigator for the State Board of Medical Examiners, who testified that Franck "specialized" in curing cancer.

Dr. Elisabeth Seiler was the speaker of the evening before the regular meeting of the Child Study group of the Kenosha College Club held on October 8th at Kenosha. Her subject was "Stupidity in Children."

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Dr. Gentz Perry, who for the past two years has been on the staff of the Schiek Clinic at Rhinelander, has moved to Evanston, Ill., where he will engage in practice.

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Dr. J. Victor Bolger, Milwaukee, sailed October 25th on the Bremen for Vienna, Berlin, Munich, Paris and London where he will take up post graduate work in diseases of the eye, ear, nose and throat. He plans to be gone for about a year. Dr. Francis J. Stirn, of Dubuque, Iowa, will have charge of his practice during Dr. Bolger's absence.

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Dr. Carl Henry Davis, Milwaukee, has been elected president of the Chicago Gynecological Society. This society meets each week on Friday evening.

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Dr. C. F. Lawler, formerly of Hilbert, has announced the opening of offices in the Williams Bldg., 308 North Woodward Ave., Birmingham, Michigan.

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Dr. R. O. Ebert has purchased and will continue the practice of Dr. L. P. Allen of Oshkosh, where the latter has practiced for more than thirty-seven years.

Dr. Ebert is a graduate of Cornell University Medical College, has spent one year at the Henry Ford Hospital in Detroit, one year at the Clinical Hospital in New York City and one and a half years as house surgeon at the Herman Knapp Memorial Hospital, New York City. He will limit his practice to diseases of the eye, ear, nose and throat.

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Dr. William A. Deerhake, superintendent of the Central State Hospital for the Criminal Insane at Waupun, was honored by election as president of the medical section of the American Prison Conference, which concluded its sessions at Toronto, Canada, the last week in September.

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Dr. H. E. Gillette was recently appointed a member of the school board at Pardeeville.

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Dr. and Mrs. G. W. Carlson of Appleton and their two children sailed on October 5th for Europe where Dr. Carlson will study during the next year. They will go directly to Vienna where the doctor will enter the University of Vienna to major in internal medicine. He will also visit clinics in London and Berlin.

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Dr. J. P. Koehler, health commissioner of Milwaukee, addressed the 1929 graduating class of the Evangelical Deaconess Hospital. Dr. Koehler, in sketching the future of nursing, stated that the expense of having a full time nurse in the home was too great for the average person and as a consequence care in hospitals would be the ultimate outcome.

THE SHELDON PRIZE

Articles from members on "How May the General Practitioner Best Increase His Usefulness" for the Sheldon Prize Contest of $100, should be in the hands of the Editor of this Journal not later than December 31st. Articles of from eight to ten typewritten pages, double spaced, are preferable to more lengthy ones. The article must be submitted under a pen name. The true name of the author together with the pen name adopted, should be enclosed in a sealed envelope.

Your thoughts may win the prize—try it!

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Dr. H. G. Walters, Cedarburg, has leased his office and practice to Dr. G. J. Warnshuis of Milwaukee and left recently for Racine where he will practice in the future.

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Dr. A. M. Charbonneau has returned to Green Bay to resume his practice in that city. Dr. Charbonneau has been doing post graduate work at San Francisco in removal of cataracts and correction of cross eye defects.

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Plans are under way for a new clinic building to be erected by Dr. A. Gundersen on South Avenue just west of the Lutheran Hospital of La Crosse. Work on the foundation has already been started and it is expected to have the building completed for occupancy by April 1st.

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Dr. C. A. Pardee, formerly of Chicago, has opened offices at 224 North Oneida Street, Appleton. Dr. Pardee is a graduate of Northwestern Medical School in 1927 and has practiced medicine at Rogers Park for several years.

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Dr. E. J. Witzemann, assistant professor of physiological chemistry, University of Wisconsin, Madison, was recently elected president of the University Medical Society. Other officers are, Dr. R. C. Buerki, superintendent at the Wisconsin General Hospital, vice president, and Dr. Phillips Greene, associate professor of surgery, secretary.

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Dr. Stuart H. Perrin has opened offices at Star Prairie. He is a son of Dr. H. E. Perrin, who has practiced in Star Prairie for forty years, and is a graduate of the University of Wisconsin.

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Dr. Alfred J. Roach, formerly of Tewksbury, Mass., has been named as superintendent of Pure Air Sanatorium, Bayfield, and will take over his duties in this capacity in the near future. Dr.

Roach is a graduate of Tufts College Medical School of Boston in 1905 and has made a specialty of tuberculosis for many years. He assumes the post left vacant by the death of Dr. J. M. Conroy.

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Dr. and Mrs. S. M. B. Smith and daughter, Eugenia, of Wausau returned the latter part of September from an automobile tour which covered 4,000 miles through parts of the east and into Canada and New Brunswick.

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Delavan's new hospital which will be constructed during the coming fall and winter months, is expected to be ready for use by the first of next June. The new building will cost in the neighborhood of $100,000, the greater part of which has already been subscribed by donations and subscriptions for the community enterprise.

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Dr. F. H. LeWohl, formerly of Peshtigo, has opened offices at 23 West Main St., Madison. He is a graduate of the University of Marquette School of Medicine in 1928.

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"Cancer is curable, so is tuberculosis, if proper treatment is started when the disease is in its early stages," Dr. J. Newton Sisk, of the Jackson Clinic, Madison, told members of the Stoughton Lions Club during the latter part of September. Dr. Sisk described radiology and told of the discovery of light rays by Roentgen.

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Forty grains of morphine were stolen when burglars broke into the office of Dr. H. O. Zurheide of Milwaukee.

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Dr. L. J. Moriarty has returned to Two Rivers following a brief tour through Ireland and Scotland. He pursued a short post graduate course at the University of Edinburgh.

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Dr. A. R. Remley of Spencer, West Virginia, has taken up his duties as senior assistant at the Central Hospital for the Criminal Insane. He is replacing Dr. Bruno Schuster, who left Waupun a few months ago. Dr. Remley is a graduate of St. Louis University School of Medicine and has been connected with the West Virginia State Hospital at Spencer for some time.

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Dr. Wendell A. Killins, Omaha, arrived in Green Bay on the 1st of October to become associated with the Williamson, Jordan and Troup Clinic. Dr. Killins is a graduate of the University of Nebraska College of Medicine in 1921 and has spent four years in the heart and goiter section of the Mayo Clinic. Since 1927 Dr. Killins has been associated with the College of Medicine at Omaha.

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Dr. and Mrs. Charles H. Bunting returned to Madison the middle of September after a summer spent abroad.

Dr. I. D. Wiltrout, Chippewa Falls, deputy state health officer, was the speaker of the evening at a recent meeting of the Hudson Road Community Club. Dr. Wiltrout's talk dealt with the maintenance of the community health and the protective methods against contagion.

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Dr. G. W. Ison, Crandon, who has been seriously ill for some time and a patient in the Ovitz Hospital at Laona has been returned to his home. His condition is much improved.

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Members of the health committee of Crawford County, with members of the County Medical Society, commissioner of the poor and trustees of the county farm held a conference on October 2nd to discuss the promotion of care of the indigent in the county. Dr. William J. Miller, Madison, a member of the State Board of Health, addressed the audience on the subject of cooperation between physicians and the county nurse. Dr. O. E. Satter, president of the Crawford County Medical Society, and Dr. C. A. Armstrong, its secretary, also spoke.

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Dr. J. C. Stucki, formerly of Gays Mills, left recently for Colorado to reside in the future.

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The Fourteenth Annual Clinical session of the American College of Physicians will be held at Minneapolis on February 10th–14th, 1930. Headquarters will be at the Minneapolis Municipal Auditorium. Dr. John H. Musser, New Orleans, is president of the organization, Dr. S. Marx White, Minneapolis, general chairman, and Dr E. R. Loveland, Philadelphia, executive secretary.

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Dr. and Mrs. George E. Reay, La Crosse, returned recently from a month's visit in the east. The doctor visited clinics in Chicago and with Mrs. Reay stopped at Mount Vernon, Alexandra, Arlington Cemetery, Lexington and other points of historical interest.

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An interesting experiment in the adaptation of lantern slides and films in the teaching of gynecology and obstetrics is being conducted this quarter at Rush by Dr. Carl Henry Davis, of Milwaukee. Dr. Davis is presenting a special course in which films and slides are used each period.

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A vast system of state or corporation medicine is inevitable in the United States unless private practitioners take definite steps to prevent it, President Glenn Frank of the University of Wisconsin declared before the American College of Surgeons which organization met at Hotel Stevens, Chicago, the week of October 14th.

Speaking before the convocation for the awarding of fellowships, President Frank said that such a system would be the natural outcome of the "growing determination to rid society of the waste and inefficiency due to disease, which is becoming one of the social passions of the period."

Estimating that 350,000,000 working days are lost annually by the 42,000,000 gainfully employed persons in the county, and that the cost of medical attention for this illness amounts, conservatively to $1,800,000,000 annually, the educator observed:

"It is obviously inevitable that the growing enlightenment of labor leadership and the intelligent self-interest of industry should set about seeing to it that this unnecessary loss is stopped. And you may be sure that when the forces of labor and the forces of industry get fully under way in a determined effort to lift from labor and industry this burden of loss from preventable disease and postponable death, they will not be concerned primarily with the effect of their program on the private practice of medicine."

Dr. Frank mentioned the large insurance companies as "a driving force back of a socio-medical program," and discussed a "growing social conscience respecting the issues of health and disease." Neither the insurance companies nor the public will be concerned with private practitioners of medicine in any health programs they may devise, he asserted.

Among Wisconsin physicians who attended the College of Surgeons meeting were: Drs. Joseph F. Smith, M. L. Jones and Paul Z. Reist, Wausau; Drs. Carl von Neupert and Fred A. Marrs, Stevens Point; Dr. C. F. N. Schram, Beloit; Drs. R. M. Carter, I. E. Levitas and J. J. Robb, Green Bay; Drs. S. E. Gavin, C. W. Leonard, E. V. Smith, W. J. Waldschmidt, and D. J. Twohig, Fond du Lac; Dr. F. E. Butler, Menomonie, and Dr. T. J. O'Leary, Superior.

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Dr. Milo Erickson, of Barneveld, has established a practice at Highland. Dr. Erickson is a graduate of Northwestern University Medical School.

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Because the electric lamp has been of great benefit to the medical profession, the Interstate Post Graduate Medical Association presented Thomas Edison with a medallion at its annual meeting held in Detroit October 21st to 25th. Dr. G. V. I. Brown, Milwaukee, presided at the meeting and Dr. Charles Mayo, Rochester, made the presentation.

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Dr. J. B. Thompson, Kaukauna, who recently took over the practice of Dr. Olin Paul, received severe injuries in an automobile accident several weeks ago. His condition is improving.

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Dr. F. J. Fechter, Elkhart Lake, has taken over the practice of the late Dr. A. W. Kratzsch, at Milwaukee.

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Dr. J. F. Shimpa and Dr. S. E. Kohn were elected members of the pediatric department of the medical staff of the Maternity and General Hospital, Milwaukee, at the October meeting of the board of directors.

Dr. E. A. Weller has opened offices in the Shafton block, Stevens Point. He is a graduate of Marquette University Medical School and served his interneship at Appleton.

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Dr. William J. Carson, Dr. John O. Dieterle, Dr. T. S. O'Malley, all of Milwaukee, were elected to fellowship in the American College of Surgeons on October 18th. Other Wisconsin physicians who received fellowships were: Dr. J. W. Boren, Marinette; Dr. J. W. Truitt, Milwaukee; Dr. Victor E. Ekblad, Superior; Dr. M. L. Jones, Wausau; Dr. W. E. Leaper, Green Bay; Dr G. V. Lynch, Oshkosh; Dr. W. H. Neumann, Sheboygan; Dr. H. M. Stang and Dr. Nels Werner, Eau Claire.

ENGAGEMENTS

Dr. Trygve Gundersen, La Crosse, to Miss Harriet Thayer Mason, of Boston, Mass.

MARRIAGES

Dr. M. H. Wall, Superior, to Miss Anna Sokolnikoff, formerly of Madison, on August 11th.

Dr. C. T. Droege, Horicon, to Miss Irma Louise Melcher, also of Horicon, on October 3rd.

Dr. Theodore M. Slemmons, Argyle, to Miss Mathilda M. Martin, at Medford on October 16th.

BIRTHS

Dr. and Mrs. E. F. Schneiders, Madison, have announced the arrival of a baby daughter born September 22nd.

DEATHS

Dr. Peter J. Calvy, Fond du Lac, died on October 16th at the Milwaukee Sanitarium where he had been a patient for the past five weeks. Dr. Calvy had been in failing health over a period of several months.

The deceased was born September 27, 1875 and graduated from the Wisconsin College of Physicians and Surgeons on June 8, 1903. Following graduation he practiced at Florence and North Fond du Lac, later becoming associated with the late Dr. J. P. Connell and eleven years ago became a member of the Fond du Lac Clinic. Dr. Calvy was a member of the Fond du Lac County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. Surviving him are his wife and four children.

Dr. E. S. Cooper, Almond, died at his home Monday, September 16th, following a stroke which he suffered on the 31st of August. Dr. Cooper was born at Memphis, Mo., in 1861 and graduated from the Missouri Medical College, St. Louis, in 1889. Later he did post graduate work at Bellevue Hospital in New York City and was at one time assistant instructor of anatomy in the College of Physicians and Surgeons, Chicago.

Dr. Cooper came to Almond more than thirty years ago and served as city health officer for fifteen years. He was a member of the Portage County Medical Society, the State Medical Society of Wisconsin and the American Medical Association. His wife survives him.

Dr. Frank S. Wade, New Richmond, died suddenly Thursday, October 3rd, from heart disease. Dr. Wade was born in the year 1858 and was a graduate of the General Medical College, Chicago, in 1883. He was licensed in the state of Wisconsin in 1901. The deceased was a member of the Pierce-St. Croix County Medical Society, the State Medical Society of Wisconsin and the American Medical Association.

SOCIETY RECORDS

NEW MEMBERS

Rettig, F. E., 1325 Vliet St., Milwaukee.
Benn, H. P., Moose Temple Bldg., Stevens Point.
Carns, Marie L., 2530 Kendall Ave., Madison.
Jackson, J. Warren, 333 No. Randall Ave., Madison.
Boner, A. J., 15 West Main St., Madison.
Richards, R. R. MacCornack Clinic, Whitehall.
Pomainville, F. J., Arpin.

CHANGES IN ADDRESS

Rens, J. L., Platteville, to Loretta.
Dietrich, L. S., Medford, to Stevens Point.
Fichman, A. M., Stevens Point, to Ft. Wayne, Ind.
Cox, A. M., Milwaukee, to Albany.
McMahon, A. E., Glenwood City, to Amery.
Prentice, J. W., Amery, to Ashland.
Brunkhorst, F. O., Hortonville, to Neenah.
Zimmermann, F. H., Columbus, to Watertown.
Stucki, J. C., Gays Mills, to Ft. Collins, Colo.

CORRESPONDENCE

Medical Interpreter

To the Editor of the Journal.

Sir: I wish to inform the subscribers of the *Medical Interpreter* that I have resigned as editor of this publication in December, 1928, and that I am no longer responsible in any manner for the actions of its promotors.

ALBERT ALLEMANN, M. D.,
Washington, D. C.

School Nurse Without Authority

State Board of Health,
Madison, September 27, 1929.

Mr. Paul G. W. Keller,
Superintendent of Schools,
Eau Claire, Wisconsin.

Dear Mr. Keller: Our attention has been called to a newspaper report to the effect that the school authorities of Eau Claire have delegated to the school nurse the authority of issuing return permits to children who have been absent from school on account of illness.

We wish to call the school authorities' attention to the fact that a school nurse is not qualified or permitted under the law to diagnose a disease or determine whether a child is free from contagious disease in order that she may intelligently issue such permit. In other words, your nurse cannot legally perform this task which rightly belongs under the direct supervision of the health officer whose duty it is to examine these children to determine whether they are free from contagion so that they may return to school.

We feel that this is a vital point in the welfare of your schools and would suggest that you take immediate steps to bring this matter to the attention of your school board and request them to rescind this order and place the issuing of return slips to children who have been out of school on account of illness in the hands of the health officer.

We would appreciate a statement from you following any school board action, in the enclosed return envelope.

Yours very truly,
G. W. HENIKA, M. D.,
Assistant State Health Officer.

Tuberculosis in Near East

Wisconsin Anti-Tuberculosis Association,
Milwaukee, Sept. 12, 1929.

Editor, Wis. Medical Journal,
Madison, Wis.

Dear Sir: A letter recently received by the Research Department of the Wisconsin Anti-Tuberculosis Association from Dr. Nabih Shabb, Surgeon of Sidon, Syria, is of interest in that it shows a very different trend of tuberculosis in the Near East as compared with the trend in the United States. To quote from Dr. Shabb's letter: "I received your letter of May 27th, and have been rather late in replying in order to try and collect some statistics which might be of some interest to you.

"I, personally, am a surgeon and do not treat cases of pulmonary tuberculosis. I have not been able to collect any correct statistics from any of my colleagues in this part of Syria where I am practicing. It seems that very few doctors in this country keep exact records of their patients.

"I am running a small private hospital for surgical cases only, as you can see from the headlines of my sheets. I admit about two hundred cases every year. On reviewing the records of my hospital for the last three year, I have found that cases of surgical tuberculosis amount to about 8% of all the cases admitted. These cases include tuberculosis of bones and joints in all its forms, tuberculous adenitis, peritonitis, renal tuberculosis, etc. I see many more than this number in my Out-Patient Department, perhaps three times as many. Four years ago, I was teaching orthopedics at the medical school of the American Univeritsy of Beirut and I remember that the Minister of Health of the Lebanon asked me then to give him statistics of the number of cases of surgical tuberculosis ex-

amined at the polyclinic of the University. I remember that the number ran to 18% of all the cases examined in the surgical clinic. The total number for three years ran up to something like four hundred, but I cannot remember the the figure exactly. As a whole, tuberculosis has been increasing rapidly in our country after the war especially the pulmonary type. Many causes are responsible for this increase. People are leaving the country to be crowded into the cities, especially Beirut which has grown remarkably after the war. The country as a whole is going poorer and poorer and the trading with second hand clothes imported from Europe and America is gaining importance. Besides this, many Syrian immigrants come back from North and South America afflicted with tuberculosis."

Sincerely yours,

L. L. Lewis.

Liability for Treatment

Madison, Wis. October 20, 1929.

Dr. — — ————,
————, Wis.

Dear Sir:

Mr. J. G. Crownhart, Secretary of the State Medical Society, has referred to me your question: When a farmer not under the compensation law has an injured employee can the attending physician collect from the employer or must he collect from the employee and the employee make the employer reimburse him?

An employee of a farmer engaged in farm work is not under the compensation law unless the farmer so elects, and of course he don't ordinarily.

The farmer employer is therefore not liable for an injury to his farm employee even though such injury be received in the course of the employment unless negligence proximately causing the injury existed on the part of the employer. This negligence may consist of negligent acts of the employer in person or in dangerous conditions about the premises or equipment which due care on the part of the employer would have remedied. Also the employer would not be liable if the employee were guilty of contributory negligence. In other words all the multitudinous rules of the law of negligence apply.

The right of the physician to his compensation however is matter of contract. That is, he is to receive his pay from whomever employed him, and if the farmer employed him, the farmer is to pay him; if the far hand employed him, the farm hand is to pay him. If both employed him, he can collect from either.

The situation in this respect is legally no different when the employer is under the compensation law. The medical aid is owing by the employer to the employee, but the Commission in the practical administration of the law directs payment by the employer to the physician.

Unless the physician is satisfied to look to the employee for his compensation, he should, in all cases, see that he is employed by the employer.

Yours truly,

F. M. Wylie,
Counsel for Society.

"A Practical Technician"

Madison, Wis., Oct. 15, 1929.

Dr. ————,
————, Wisconsin.

Dear Dr. ————,

You ask "Can a practical technician establish a laboratory and solicit business from hospitals and physicians? Can such a practical technician do x-ray examinations, basal metabolism tests, blood counts and urinalyses?"

By the term "practical technician" it is my understanding that you mean one not licensed to practice medicine and surgery, but possibly a nurse who has had some previous training in a physician's office.

In my opinion such a technician may not so operate a separate laboratory. Under the Basic Science law all must be licensed who "treat the sick" and the definition of treating the stick states in part "to treat the sick is to examine into the fact, condition, or cause of human health or disease,***** for compensation direct or indirect or in the expectation thereof".

The results obtained by technicians, unless they have had adequate training and work under adequate supervision, often means incorrect diagnosis with resultant direct injury to patients. It is my opinion that no separate clinical pathological laboratory should be allowed to operate without the direction and supervision of a clinical pathologist.

Physicians will do well to withhold their support from any such institution as you describe, not only because it appears to be operated illegally, but because the physician himself may well be held liable in a malpractice action for any mistakes of such a technician even though she is operating independently.

Most sincerely yours,

George Crownhart,
Secretary.

Land owners are given full protection of their property under a new law passed by the 1929 legislature and now in force. The new law promises to become one of the most discussed measures both by city and farm people.

The new enactment provides that no one may enter any enclosed or cultivated lands or woodlots connected therewith for the purpose of hunting, fishing, trapping, netting, gathering fruit, nuts, straw, turf, vegetables or herbs without consent of the owner. Violation of this law carries penalties of from $5 to $100 in fine or from 10 to 30 days in jail.

The new law means the end of people wandering through the country, hunting, fishing or picking berries or grapes wherever they may find them. In many sections of the state it means that citizens cannot hunt unless they have specific permission from some farmer to hunt on his land. In these same sections berry and grape picking promises to be considerably curtailed. Trout fishermen will also find it necessary to be more careful as to where they follow their favorite streams.

City people may find the new law irksome if it is enforced but it answers the complaint of farmers who have found that hunters are not adverse to shooting a chicken in place of a rabbit.

The new law was sponsored by Senator Herman J. Severson, Iola, who declares that he has heard of many cases where tourists felt free to appropriate corn, vegetables or any fruit they found growing along their path.

Under the new law it is not necessary for farmers to prove damages and anyone guilty of any of the offenses outlined is subject to the penalty.

* * *

Preliminary studies and plans for a crippled children's hospital to be erected at the University of Wisconsin under an appropriation of $300,000 by the state legislature, are being made by a committee of six recently appointed by the board of regents.

The committee, including three regents and three doctors, is expected to visit examples of such institutions as a part of their investigations. On the committee are Regents Mead, Callahan, and Gunderson, Dr. C. R. Bardeen, dean of the Medical School, Dr. R. C. Buerki, superintendent of the Wisconsin General Hospital, and Dr. F. J. Gaenslen, orthopedic surgeon at the hospital.

* * *

Coroners working without salary, under the fee system, are entitled to the increase in compensation voted by the last legislature, Dist. Atty. Herman Salen of Waukesha has been informed by T. L. McIntosh, assistant attorney general. Mr. McIntosh said that the provision that public officials may not benefit by pay raises voted during their terms of office does not apply to officials receiving only fees.

* * *

Diagnosing the ailments of 21,125 bird and animal specimens in the hope of finding cures and methods of controlling various maladies was part of the work of the Wisconsin College of Agriculture veterinary science department during the past year.

Contagious abortion blood samples, totaling 17,003, came to the college in the largest numbers. Poultry disease suspects were next in line with 3,502 specimens. Cattle, sheep, swine, horse, pet-stock and fur-bearing animal specimens totaled 621.

As well as all of this diagnostic work, the department saved Wisconsin farmers a great deal of money by answering their inquiries regarding some few useless stock tonics and mineral feeds that have been tested out at the college.

* * *

"Seek and ye shall find"—at least if you seek in the university library. For this unit sent out 7,863 packages of informational material on 3,057 subjects to 807 Wisconsin communities during the last 12 months according to the university report for the library issued through Miss Almere L. Scott of the university extension division.

About 75 per cent of the communities had no libraries. Organizations served included 86 churches and religious organizations, 110 community clubs, 35 juvenile clubs, 21 men's clubs, 117 parent-teacher organizations, 157 rural clubs, 10 teachers' organizations, 295 women's clubs, 381 high schools, 124 rural schools and 229 other educational institutions.

Each package is designed to meet the individual need whether it be that of the rural school pupil or that of the bank president.

* * *

Wisconsin passes a milestone in its fight on bovine tuberculosis about April 1 when all of its 3,000,000 cattle population will have undergone at least the initial tuberculin test. From April on the work will consist entirely of retesting herds with a marked reduction in the number of reactors from the time when the state first undertook the work in the various counties. The fight against the disease is expected to grow much less expensive. The state spent $570,000 this year.

* * *

An increase of 430 over the enrollment of last year at the University of Wisconsin is recorded this year among a total of 9,507 students registered on October 5, announces Frank O. Holt, registrar.

The increase over the corresponding day in 1928 was unexpected both because the non-resident fee had been raised and because the enrollment of colleges and universities throughout the country last year seemed to indicate that the ebb tide had been reached, comments Mr. Holt. The total figure is the largest ever reached at the University.

* * *

With better transportation facilities, attendance at rural schools dropped 13 percent from 1913 to 1928, according to figures compiled here. Attendance at all other schools showed an increase.

The total school population increased 10 percent during this period. Rural school attendance dropped from 165,894 to 146,146 during these years. Elementary schools increased 12 percent and the biggest increase in enrollment came in high schools, 150 percent. Normal schools jumped 25 percent and the university 128 percent during these years.

* * *

First distribution of game birds raised on the

state game farm is now being made with 2,000 pheasants being shipped out from the farm at Fish Creek to 120 different places throughout the state, according to W. B. Grange, superintendent of game.

* * *

The conservation commission expects to complete the purchase of Copper Falls park of 520 acres this fall so that the area can be opened to the public in spring. The area is described as one of unusual beauty with waterfalls and gorge scenery combined with naturally wooded hills.

The main feature of the new park is Copper Falls which is formed by the Bad River flowing over in cataract form, a high cliff. About a quarter of a mile below Copper Falls and also included in the park area is another waterfall where Tyler's Fork stream comes tumbling into the main river. Then for several hundred yards the river rushes through a high gorge which it has carved out of the solid rock.

* * *

It costs Wisconsin's governmental units about a quarter million dollars a year to transport 12,800 children to school with the cost of this service in rural communities growing annually. The state's share of this transportation cost last year was about $170,500 while the districts contributed as much if not more. The state has taken the position that each child is entitled to a school within easy walking distance or daily transportation.

* * *

It cost Wisconsin an average of $226 for every bill introduced in the legislature, counting those that failed as well as those enacted. The legislature handled about 1,400 bills at a total cost of over $317,000. These bills included some that took but a few minutes to be disposed of and others that wandered their way through most of the session.

* * *

In spite of considerable alarm among apple growers in the state that serious injury to their crops may be due to the work of the Mediterranean fruit fly that has caused so much damage in Florida. E. L. Chambers of the state department of agriculture and markets, announces that these fears are ungrounded.

The state entomologist has investigated the reports and has found no trace of the dreaded pest in this state. He finds that the injury to the crops is due entirely to the native apple maggot popularly known as the "railroad worm."

* * *

The name of the Wisconsin Veterans' Home, Waupaca, has been changed to the Grand Army Home for Veterans and the management is now placed directly under Adjutant General Ralph M. Immell where the old board of managers was formerly in complete control.

The change was made by a law passed at the last session of the legislature and which went into effect on October 1. Under the new law there is set up a new advisory board consisting of Adjutant General Immell, the chief quartermaster, Lieut. Col. Harry Williams; the state surgeon, Col. G. E. Seaman; department commanders of the G. A. R., Lloyd D. Sampson, and four members of the G. A. R. to be named by the governor.

* * *

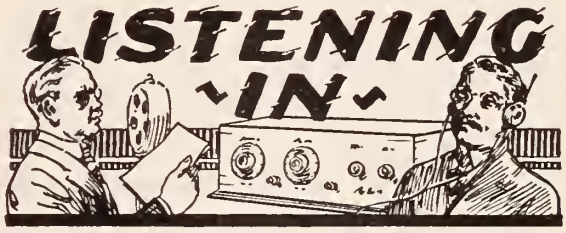
The state tax commission has announced that the state assessment of all general property this year is $5,975,052,415 as compared with $5,872,402,648 last year, an increase of $103,594,767. The tax commission found that the value of real estate in towns or rural districts had decreased while the value of real estate in villages and cities increased. As the result in the growth in the value of cities they will pay a larger portion of the tax this year. Last year Milwaukee paid 29 percent of the state's taxes. This year it will pay 30 percent.

* * *

Night prowlers and persons interested in astronomical phenomena will have a chance to see showers of meteors during the middle of November when during several nights the so-called Leonids streak across the sky, announces Prof. C. M. Huffer of Washburn observatory at the University of Wisconsin.

The Leonid shower gets its name from the constellation Leo, or the big Sickle, which is in the direction where the meteors appear. This constellation rises north of east after midnight in November.

Last year observers at Washburn observatory counted 111 meteors in less than three hours during the night of November 14. One meteor, as bright as a crescent moon, was visible to the naked eye for 12 minutes in its course across the sky.



OLD TRANSACTIONS WANTED

To complete the files of the State Society, the Society is most anxious to secure the following printed volumes of its transactions: Volumes 1 to 5 inclusive for the years 1867 to 1871 inclusive. The Society will gladly make suitable compensation to secure any of these old volumes.

EXAMINATIONS WITHOUT COMPENSATION

In an address to members of the Grant County Medical Society, County Judge Brennan warned the members not to make physical examinations of supposedly indigent patients, applicants for care at the State Hospital except upon order of the County Judge.

"It has more than once happened that the appli-

cant secured his papers and then asked for a physical examination before he came to the county judge. If it is afterwards determined that the applicant is not an indigent, the physician cannot secure compensation for his examination even though it was made in good faith. Wait until the patient comes with an order from the county judge. Of course this does not apply to the part pay or pay patient."

WHEN INDIGENT

In the same address Judge Brennan pointed out that in his experience people were willing to be considered indigent for the purpose of securing medical care who were, in fact, not town or county charges.

"If a person can borrow a reasonable amount of money for medical care for which he should have made earlier provision, such a person is not indigent," declared Judge Brennan. "With the present day habit of purchasing luxuries on the installment plan of course many people have not ready money to meet emergencies for which they should have made provision. But as long as they can meet the situation by giving up luxuries or borrowing a reasonable amount, they should not be county charges for medical care. That is hardly fair to the taxpayers."

TWO A WEEK

The Secretary has turned traveling man for the year. In an effort to visit each society prior to June, schedules are being arranged which call for visits to two county societies each week as an average for the nine months. Six visits were made in October and seven have been scheduled for November.

NO BLUE BOOK

To effect economies to meet essentials of the 1930 budget, the Society will not publish the Blue Book this fall. Articles setting forth allowable deduction and depreciations under both the federal and state income tax laws will be published, however, in the January issue of this Journal. Watch for these articles in that issue.

Proceedings of the House of Delegates; Eighty-Eighth Anniversary Meeting, State Medical Society of Wisconsin

TUESDAY NIGHT SESSION

September 10, 1929

The House of Delegates of the Eighty-Eighth Anniversary Meeting of the State Medical Society of Wisconsin convened at seven-thirty p. m. at the Union Memorial Building, Madison, Wisconsin, Dr. H. P. Greeley, of Madison, presiding.

SPEAKER GREELEY: The meeting will please come to order.

I had a speech of welcome all prepared which would take half an hour to deliver, but I have been sitting in the Council all afternoon, and the speech is now in the hands of the Editorial Board, and if it passes the censors I shall deliver it tomorrow night. (Laughter).

The first business is the announcement of the reference committee which I have appointed. First, the Committee on Credentials: E. L. Bradbury, of Neillsville, Chairman; H. J. Irwin, Baraboo, and H. B. Keland, Racine.

Committee on Reports of Officers: C. J. Smiles, Ashland; G. Gundersen, LaCrosse, and R. L. Cowles, Green Bay.

Committee on Reports of Standing Committees: S. J. Seeger, Milwaukee, Chairman; C. C. Vogel, Elroy, and J. C. Betz, Boscobel.

Committee on Resolutions: A. J. Wiesender, Berlin, Chairman; J. F. Mauermann, Monroe; G. R. Duer, Marinette; M. G. Peterman, Milwaukee, and A. S. Thompson, Mt. Horeb.

I shall now ask the Chairman of the Committee on Credentials to make his preliminary report. We will hear from Dr. Bradbury.

DR. BRADBURY: We have fifty-nine registered, according to the attendance slips. I move you that this list be accepted as the roll of the house.

. . . The motion was seconded by Dr. Mauermann, of Monroe, and carried . . .

SPEAKER GREELEY: We have as our guest this evening the president of an allied society, the Wisconsin Pharmaceutical Association. I take pleasure in introducing to you Professor Edward Kramers of the University of Wisconsin.

PROF. KRAMERS: Not long after the completion of the great canal that connects the Atlantic with the Pacific, the engineer announced to the world that he had constructed this wonder of the twentieth century. "No," said the physician, "had I not rendered the cannal zone sanitary you would not live to make the boast. It is I who built the cannal." Then entered the chemist who had come into the limelight in those days. Said he, "Neither the engineer nor the physician built the canal. Had I not made the cement for the engineer, he could not have accomplished the task. Had I not supplied the physician with synthetic remedies he, too, would have been powerless. It is I who built the canal."

For some time I expected the pharmacist to come along and claim that, but for the invention of the tablet machine with its mass production of this convenient mode of administration, the physician could not have counted out his antifebrics and antiseptics rapidly enough to make possible the great task by engineer and laboring man. So far as I know, neither laboring man nor pharmacist has been boastful enough to make such a claim and I am glad of it.

What inferences may be drawn from the human comedy thus briefly outlined concerning the fraternal relations between physician and engineer on the

one hand and physician and chemist on the other hand is not my business to point out. I have been summoned to say a few words on the fraternal relations between the State Medical Society and the State Pharmaceutical Association.

Medicine has long looked upon pharmacy as her hand maid. If any of you have read LaWall's recent popular treatise "Four Thousand Years of Pharmacy," you may have been amazed to learn that, in the evolution of human society, pharmacy came first and that medicine is an outgrowth of the art of preparing medicaments. However, I shall not take this statement as my text. It might be just as fruitful to debate so scholastic a question as the one: which came first, the hen or the egg?

When we deal with history not quite as ancient as that to which La Wall resorts, we learn from Chaucer's "Canterbury Tales" that of the physician it was said, "Full many had he his apothecaries." These were, to all intents and purposes, his understudies to whom he turned over the menial task of preparing the pills and potions while he himself paraded in the role of a grand sire. No doubt, the situation was very much the same as that which prevailed later in the colonies and the early United States. About the only way to study medicine at that time, and it continued to a large extent in the days of my youth, was to become a so-called student in the office of a medical practitioner. It was the duty of the student to sweep the office and waiting room, if these were swept at all, and in the earlier days, you may recall Cooper's, "The Pioneers," to compound the prescriptions in accordance with the hieroglyphics of his master.

However, the apothecaries of England were not content with the menial position from which they were not permitted to rise by the exclusive members of the College of Physicians. After the barber-surgeons had gained for themselves the right to organize a College of Surgeons and to elect thereto those whom they were willing to allow to practice medicine under the title of surgeons, the apothecaries bided their time. This came when, during the plague, both bishops and physicians had fled from the city of London, leaving the stricken citizens at the mercy of the apothecaries. It was then that the latter succeeded in persuading Parliament to grant them an independent organization, the Society of Apothecaries, whose members had the right to practice medicine in a modified manner. Thus, they were not permitted to charge a fee for their medical advice but they received compensation for the medicine which they dispensed.

You will recall that in "St. Ronan's Well," Scott described the physicians who frequented the watering places. The old dames who sought rejuvenation would consult them in a semi-social, semi-professional way. Whereupon the physician would draw a small box from his vest pocket and offer a pill or two. When the quasi-patient offered to pay for the pill, the physician protested, for it was beneath his dignity to accept money for any medicament which he might dispense. However, by giving her a pill he placed the dame under obligation. Hence, she felt obliged to consult him in his office where he gladly accepted the pound for the advice which he had given, in place of the shilling which he had previously refused for the pill.

You will also recall that in "Jane Ayre," of Charlotte Bronte, the physician was consulted when a member of the family was sick, but in the case of illness of the governess or of one of the servants the apothecary was called.

Those of you who read the papers during the recent illness of King George may remember that it was an apothecary who was in constant attendance, whereas the physician came in for a daily consultation.

If in England the apothecary is not supposed to stand at the top of the medical ladder, his reputation in this country corresponds to the esteem with which he is regarded in the mother country.

Nevertheless our esteemed colleague and friend of Johns Hopkins recently accepted the medal of the Apothecaries Society, though he was of the opinion that few apothecaries had achieved fame. I took the liberty to point out to him that, whereas the names of most English physicians were buried in the register of the college, the name of Hans Sloane, who was first, last and all the time an apothecary, will be remembered as long as medical history will be written.

The quarrel between physician and apothecary, of which Garth's "Dispensary," is one of the numerous literary monuments, was followed by a similar quarrel between the apothecary on the one hand and the chemist and druggist on the other hand. The apothecary feared that the newcomer wanted to establish still another class of medico-pharmaceutical practitioners. When the latter disclaimed any such intention for himself, the way was paved for the organization again by Act of Parliament of the Pharmaceutical Society of Great Britain. Thus there was created in the British Isles a pharmaceutical practitioner who did not want to practice medicine and who was willing to exercise his art on a commercial basis.

To what the commercialization of pharmacy has led under the laissez faire policy, both in England as well as in the United States, you well know. Of a counter movement that is less conspicuous you may be less aware. I refer to the professionalizing of pharmacy that is going on quietly, yet more rapidly than most of us were aware of.

When some years ago we established our Pharmaceutical Garden, the then business manager of the University asked me whether in an age of synthetics such an enterprise was worth while. I replied by asking him three questions. The first was, "Have you heard of morphine being made synthetically?" To which he had to answer, "No."

In the second question, I substituted strychnine

ATTENDANCE, HOUSE OF DELEGATES, MADISON, 1929

Society	Delegate	1	2	3
Ashland—B–I	C. J. Smiles, Ashland	x	x	a
Barron—P–W–S–B	D. L. Dawson, Rice Lake	x	x	x
Brown–Kewaunee	R. L. Cowles, Green Bay	x	x	x
	W. M. Wochos, Kewaunee*	x	x	a
Clark	E. L. Bradbury, Neillsville	x	x	a
Columbia	A. F. Schmeling, Columbus	x	x	x
Crawford	A. J. McDowell, Soldiers Grove	x	x	x
Dane	J. P. Dean, Madison	x	a	a
	A. S. Thompson, Mt. Horeb	x	x	x
	S. J. Briggs, Madison*	a	x	a
Douglas	T. J. O'Leary, Superior	x	x	x
Eau Claire & Assoc. Cos.	J. A. Halgren, Menonomie	x	x	a
	F. C. Kinsman, Eau Claire	x	x	a
Fond du Lac	S. E. Gavin, Fond du Lac	x	x	x
Grant	J. C. Betz, Boscobel	x	x	x
Green	J. F. Mauermann, Monroe	x	x	x
Green Lake—W–A	A. J. Wiesender, Berlin	x	a	a
Jefferson	H. O. Caswell, Ft. Atkinson	x	a	a
Juneau	C. C. Vogel, Elroy	x	x	a
Kenosha	G. F. Adams, Kenosha	x	x	x
	A. F. Ruffalo, Kenosha*	x	a	a
La Crosse	G. Gundersen, La Crosse	x	x	x
	W. J. Jones, La Crosse*	x	a	a
Lafayette	Pearce Prentiss, South Wayne	a	x	x
Langlade	J. C. Wright, Antigo	x	x	x
Lincoln	E. O. Ravn, Merrill*	x	x	x
Manitowoc	F. E. Turgasen, Manitowoc*	x	a	a
Marathon	H. H. Christensen, Wausau	x	x	x
Marinette–Florence	G. R. Duer, Marinette	x	x	x
Milwaukee	R. J. Dalton, Milwaukee*	x	x	a
	J. O. Dieterle, Milwaukee	x	x	x
	H. J. Gramling, Milwaukee	x	x	x
	S. Higgins, Milwaukee*	x	x	x
	B. Krueger, Cudahy	x	x	x
	Oscar Lotz, Milwaukee*	x	x	a
	Edith McCann, Milwaukee*	x	x	x
	E. W. Miller, Milwaukee	x	x	x
	G. W. Neilson, Milwaukee*	x	x	x
	M. G. Peterman, Milwaukee	x	x	x
	E. F. Peterson, Wauwatosa	x	x	x
	A. A. Pleyte, Milwaukee*	x	x	a
	H. W. Powers, Milwaukee	x	x	a
	H. C. Schumm, Milwaukee*	x	x	x
	S. J. Seeger, Milwaukee	x	x	x
	F. A. Thompson, Milwaukee	x	x	a
	D. E. W. Wenstrand, Milwaukee	x	x	x
	T. Willett, West Allis	x	x	x
Monroe	S. D. Beebe, Sparta	x	x	a
Outagamie	J. B. MacLaren, Appleton*	x	x	a
	V. F. Marshall, Appleton	x	x	x
Pierce–St. Croix	Rolla Cairns, River Falls*	x	x	a
	A. E. McMahon, Amery	x	x	x
Portage	Erich Wisiol, Stevens Point	x	x	x
Price–Taylor	F. W. Mitchell, Ogema	x	x	x
Racine	H. B. Keland, Racine	x	x	x
Richland	H. C. McCarthy, Richland Center	x	a	a
Rock	H. O. Delaney, Beloit*	x	a	a
	W. H. McGuire, Janesville	x	a	a
Shawano	A. J. Gates, Tigerton	x	x	x
Sheboygan	Otho Fiedler, Sheboygan	x	x	x
	C. J. Weber, Sheboygan*	x	x	a
Trempealeau—J–B	H. A. Jegi, Galesville*	x	x	a
	C. F. Peterson, Independence	x	x	x
Walworth	E. J. Fucik, Williams Bay	x	x	a
Washington–Ozaukee	H. M. Lynch, Allenton	x	x	a
Waukesha	M. R. Wilkinson, Oconomowoc	x	a	a
Waupaca	F. E. Chandler, Waupaca	a	x	x
Winnebago	W. P. Wheeler, Oshkosh*	x	x	a
Wood	F. X. Pomainville, Wisconsin Rapids	x	x	a
	K. H. Doege, Marshfield*	x	x	x

* Indicates alternate; x present; a absent.

Note—Attendance recorded on basis of signed slip s deposited with the Secretary.

District	Councilor	1	2	3
First	A. W. Rogers, Oconomowoc	x	x	x
Second	F. W. Pope, Racine	x	x	x
Third	C. A. Harper, Madison	x	x	a
Fourth	Wilson Cunningham, Platteville	x	x	a
Fifth	J. L. Shaw, Manitowoc	a	a	a
Sixth	F. G. Connell, Oshkosh	x	x	a
Seventh	Edward Evans, La Crosse	a	a	a
Eighth	T. J. Redelings, Marinette	a	x	x
Ninth	Joseph F. Smith, Wausau	x	x	x
Tenth	H. M. Stang, Eau Claire	a	a	a
Eleventh	J. M. Dodd, Ashland	a	x	a
Twelfth	R. W. Blumenthal, Milwaukee	x	x	a
	Rock Sleyster, Wauwatosa, Treas.	x	x	a
	H. P. Greeley, Madison, Speaker	x	x	x

for morphine and in the third quinine. His answer being negative in each case, he had nothing further to say.

In like manner the question has been asked, "Is it worth while for the state to spend money on a scientific pharmaceutical education when our drug stores are commercializing at a frightful rate?" My answer was that the time would come when our pharmaceutical graduates would act as a professional leaven that would add new life to the commercialized body of pharmacy. Even the exponents of extreme commercialism have begun to realize that they have been killing the goose that laid the golden egg. Others have demonstrated that professional pharmacy can be practiced successfully not only in large cities of the East, but in young western communities with but a moderate population. Only a few weeks ago at the annual meeting of the American Pharmaceutical Association Dean Jordan of Purdue reported on the progress made, in recent years, by professional pharmacists that surprised all who heard his report.

We may hope, therefore, for a reapproachment between scientific medicine and pharmacy. Professionally, also, we have fundamentally like, if not the same problems to confront. Socialization of both medicine and pharmacy is in the air. How are the two professions going to meet this economic problem so that both callings may not be injured and society be best served? Truly a great problem that will tax the best minds of both medicine and pharmacy.

In closing, permit me to thank you for the spirit of fraternal good will and cooperation implied in your invitation to say a few words on this occasion. That your deliberations may redound to the benefit of your profession and of the people of the state is the sincere wish of your sister organization, the Wisconsin Pharmaceutical Association. (Applause)

Speaker Greeley: We are very much indebted to Dr. Kramers for this broad address. We know how much we owe to the profession of pharmacy. I presume we are, all of us, thankful that at some time during our early career they may have saved some of our patients' lives by holding up a prescription that had an over-dose or something of that sort. We are glad to welcome him here.

Has Dr. David Wheeler, President of the State Dental Society come in? (not present).

The Chair will now entertain a motion to accept the minutes of the last meeting of this House, as printed in the November issue of the Wisconsin Medical Journal, 1928.

Dr. A. J. McDowell (Soldiers Grove): I move that we accept the minutes as printed in the November issue.

. . . The motion was seconded by Dr. McGuire, of Janesville, and carried . . .

Speaker Greeley: You have all had, since the reports of the officers and standing committees were published, an additional copy sent you of the reports of the standing committees of the Society. Since the publication of those reports there may be some additions or corrections. The Chair will now give the chairmen of these committees an opportunity to add to their reports or make corrections. The first is the Chairman of the Council, Dr. Arthur W. Rogers, of Oconomowoc.

Dr. Rogers: Mr. President, I have only this oral report to make regarding the by-laws:

"*Resolved*, that Section 11 be added to Chapter VI of the by-laws, to read as follows:

"Section 11. The Council shall manage the 'Foundation Fund' of the Society, exercising as broad a discretion in the use thereof as shall be permissible by law and the terms under which the moneys or properties of said fund were received. Moneys and properties given, granted, devised or bequeathed to the Society in trust for the advancement of medical science may be accepted or rejected by the Council, and when accepted shall constitute the 'Foundation Fund.' In the discretion of the Council, any of such moneys or properties or earnings thereof may be returned to the donor or grantor or to his estate or relatives."

Speaker Greeley: This report, together with the original printed report, is hereby referred to the Committee on Reports of Officers except that section relating to dues, which is referred to the Committee on Resolutions.

We will now have Mr. Crownhart's report.

Secretary Crownhart: Mr. Speaker and Members of the Society: Since the Secretary's report was published, some additions have been made in membership figures. At this date, in 1928, a year ago, we had 2,077 members. Today we have 2,139, with some nineteen applications pending, a gain in actual membership of sixty-two, not counting the

nineteen applicants. We have as delinquents fifty-nine, as compared to seventy-six a year ago. We have as new members 107 today, as compared to 100 at this time last year.

In summarizing the report of the Secretary very briefly, the packet library service extended to physicians throughout the state for the cost of postage, through the Extension Division, has grown tremendously. Where we started a few years ago with a few requests here and there, today they are filling 100 requests a week. We anticipate as this service becomes better known, it will be extended until it fills 200 requests a week. The Extension Courses, administered through the Extension Division, with the cooperation of the advisory committee of this Society, have been working out more successfully than was even anticipated. They have been meeting with real favor throughout the state.

The Extension lectures, made available to every county medical society in the state, are being used more and more, and this is a notable accomplishment. Where several years ago it cost the county society twenty-five or fifty dollars to have a man come to be the basis of a program, today they can secure this speaker or two or three speakers, if they wish, without any cost to the Society whatever. This is a tremendous advantage to the small society with limited funds and a limited membership.

In the field of direct service to the individual members, you have all received the 1929 Blue Book. Members have told us that this has been a very worth while publication.

Your Society, despite the long legislative session this year, has made rather an extensive survey into the field of malpractice, medical defense and malpractice policies. We hope to have a report for you shortly. In the field of malpractice itself, your Society has continued in making an investigation into the causes of malpractice suits, and we are confident we are making headway. It is one of the things that it is rather difficult to show, but we feel that we are obtaining results.

In the field of legislation, your Society had seven proposals of its own to make. And may I say here that while physicians might have an interest in the proposals we made, we were very careful to introduce no bills in which the public interest was not a paramount one. Of the seven proposals, five were adopted, one of which means $19,000 a year to the physicians of this state.

We are proud of the $10,000 appropriation to the State Board of Medical Examiners for the elimination of quackery. Wisconsin is the first state, among all others, to establish the principle that laws governing licensure are really basic public health laws and should be enforced as are all other public health laws, by the state, and not by the physicians. This is contrary to the ends to which many states have resorted, where physicians are assessed by the state from two to five dollars a year for this essential work.

We are proud of the fact that no bill opposed by your Society passed either house of the Wisconsin legislature, and that the good feeling that gradually has been growing between this Society and the legislature has been enhanced during the present session.

Mr. Speaker, if I may digress here for a moment, I would like to present to this house a member of the legislative body, also a representative of this Society, who has done wonderful work for the medical profession of the state and to whom we feel a very great indebtedness, Dr. A. J. McDowell. (Applause). Dr. McDowell typifies in the legislature the State Medical Society of Wisconsin, for truly he is the family physician.

Your Secretary concludes his report with the suggestion that one period in the life of your State Society is being gradually brought to a close at this time, and he refers to the period of what he calls corrective effort; in other words, the period of changing existing conditions that were not satisfactory to the profession. One by one, during the past six and one-half years, we have been getting at these objectives, whittling them down in numbers until now that period is almost past in the Society's efforts.

It is easy to show results to the members when you can go to them and say we prevented this bill from passing, and physicians will save $19,000 a year from now on; or such and such a condition was true and now it is wiped out, or the narcotic tax was three dollars, and despite the fact that the Treasurer of the United States tried to bring it back to three dollars, it is still one dollar.

Those are accomplishments every one can see and measure. But now we are coming to a period of the Society's life where in the mind of your Secretary we are going to do a far more valuable work, yet as you will appreciate, it will be a type of work that will be harder to demonstrate in concrete results attained.

There are many, many organizations and many of the laity throughout the state who are interested in public health work of one type or another. They are all inspired, I know, by the very best of motives. They want to see this condition corrected or that goal attained, and in attaining that goal your Secretary feels that this Society can be a tremendous aid to those organizations in a directive sort of way. We can point out where others have failed in the past, those objectives which we feel sure will fail in the future, those goals where the beneficial results immediately will be great but the end results very poor. And in working in this close cooperation, and we hope harmony, we think we can accomplish a great deal for the members as well as the public. But it will not be the type of work where we can turn to the members and say, "We have saved you ten dollars a year here or ten dollars a year there." It will require the very closest cooperation of members and we hope, though it is a little difficult to demonstrate, that we will be able to point out to the members something that is satisfactory, so that

a kindly feeling between the member, no matter where he may be in the state, and his State Society will always continue to exist. (Applause).

SPEAKER GREELEY: The Chair assumes the House of Delegates is familiar with the work of the lay Secretary and that each delegate will take home to his county medical society, acting as a liaison officer, all the information which the lay Secretary gives us in his report, and will familiarize every member of his own society with the work that is going on.

Altogether too often the members of the House of Delegates—and I speak thus because I have been one myself—make little or no report to the county society, and do not see that their own society is made familiar with what is being done during the year and what has been reported at the meeting.

The Secretary's report is referred to the Committee on Reports of Officers. The next order of business is the report of the Treasurer.

DR. ROCK SLEYSTER:

STATE MEDICAL SOCIETY OF WISCONSIN

Treasurer's Report

As at September 7, 1929

	General Fund	Medical Defense Fund
Balance January 1, 1921	$ 1,297.69	$2,658.58
Receipts to Sept. 7, 1929	23,436.25	2,813.88
	24,733.94	5,472.46
Disbursements to September 7, 1929	21,978.49	5,247.40
Bank Balance in funds Sept. 7, 1929	2,755.45	225.06

Recapitulation of Funds

General Fund:		
Bank Balance, Sept. 7, 1929	$ 2,755.45	
Investment securities	23,000.00	$25,755.45
Medical Defense Fund:		
Bank Balance Sept. 7, 1929	225.06	
Investment securities	7,000.00	7,225.06
Total Cash Resources, Sept. 7, 1929		32,980.51

Disbursements from Medical Defense Fund:

July 17, 1929	
Hoyt, Bender, McIntyre & Hoyt	$ 208.70
Aug. 20, 1929	
Lines, Spooner & Quarles	38.70
	$ 247.40

SPEAKER GREELEY: The report of the Treasurer is referred to the Committee on Reports of Officers. The next order of business is the report of the Committee on Public Policy, Dr. Otho Fiedler, Chairman.

DR. FIEDLER: The Committee has nothing more to add to the report submitted, but would like to call to your attention the last paragraph of the report, in which we recognize the fact that the success of the program last year is due almost entirely to the Secretary. His permanent residence in Madison has been of most valuable aid in bringing projects of the State Medcial Society to the members of the legislature. We have not tried in any way to organize a lobby. We recognize that the members of the legislature are public-spirited citizens and want to do the thing right. All that was attempted was to bring the facts before them, and on that basis we had great success with the program which we brought before the legislature this year. (Applause).

SPEAKER GREELEY: The report of the Committee on Public Policy is referred to the Committee on Report of Standing Committees. The next order of business is the report of the Committee on Health and Public Instruction, Dr. H. M. Stang, Chairman.

SECRETARY CROWNHART: I understand that Dr. Stang is ill.

SPEAKER GREELEY: The next order of business is the report of the Committee on Medical Education and Hospital, Dr. Joseph Lambert. I believe Dr. Lambert is not here and we will lay this over until tomorrow. The next order of business is the report of the Editorial Board, Dr. Oscar Lotz.

DR. LOTZ: No additional report, Mr. Speaker.

SPEAKER GREELEY: This report is referred to the Committee on Reports of Standing Committees. The next order of business is the report of the Committee on Medical Defense, Dr. A. J. Patek.

DR. PATEK: There is nothing further to report.

SPEAKER GREELEY: This report is referred to the Committee on Standing Committees.

The secretary will report for the Committee on Necrology.

SECRETARY CROWNHART: The Committee, has to submit, in addition to the report printed, in your pamphlet, the death of following members:

A. W. Kratzsch, Milwaukee
B. B. Rowley, Milwaukee
W. B. Monroe, Monroe
H. J. Suttle, Viroqua
A. L. Christofferson, Kenosha

SPEAKER GREELEY: As a tribute, this report will be accepted by a rising vote.

. . . The members paid silent tribute to the deceased members . . .

SPEAKER GREELEY: The next order of business is the report of delegates to the American Medical Association. While Dr. Smith will make a report before the general session, we would like to hear a synopsis by Dr. J. Gurney Taylor of Milwaukee, and Dr. W. E. Bannen, of La Crosse. We will hear first from Dr. Taylor.

DR. TAYLOR: As a delegate to the American Medical Association, I would like to call to your attention first the registration. While small, only a total of 3,061, the largest part of this registration was from the western coast, 1,833; the Midwest, 633; Eastern States, 256; Southern States, 286; Miscellaneous, 53.

The Speaker of the House paid tribute to the members or delegates who had died, and especially

was tribute paid to Dr. Horace M. Brown, who had been delegate for many years. The following tribute was given him: "And who can banish the memory of Horace M. Brown? Of outstanding individualism and with attention arresting qualities he served and achieved for the good of all our members."

In the address of President W. S. Thayer, he commended the Council on Medical Education and Hospitals in their work on the more serious study and classification of hospitals, and stressed consideration of the necessity of carrying on the Index Catalogue of the Library of the Surgeon General's Office, provided the time arrives when its continuance is threatened.

He furthermore referred to the character of national legislation enacted which has interfered with our independence and personal liberty; as a result he was attacked in the press by Reverend C. T. Wilson and classified as a wet.

"The House commended and endorsed the sentiments expressed by President Thayer concerning legislative enactments that are inimical to the best interests of the medical profession and the public by restricting medical men as to what shall and what shall not be prescribed for the relief of human ills.

It does, however, recognize the wisdom of the advice of President Thayer to the effect that these questions should be considered by the House of Delegates in a spirit of temperance and good judgment and with proper respect for our traditions."

The high cost of medical care was discussed by President-Elect Harris, and it was urged by the House that the whole subject should receive the serious consideration of the medical profession: "That the increasing cost of sickness cannot be justly charged to the medical profession, inasmuch as in a general way compensation for medical and surgical service has not increased in proportion to the increased cost of sickness occasioned by other contributing factors, nor has the compensation of the physicians and surgeons increased to anything like the increase that has occurred in the cost of everything else."

This was thought to be a problem for solution by the medical profession and not by lay individuals or lay organizations.

Commendation of a building plan for housing the headquarters in Chicago, as well as the preparation of a history of the organization, was enacted.

The Judicial Council was instructed to present a comprehensive statement to the House of Delegates at the 1930 meeting relative "to the practice of medicine by corporations, clinics, philanthropic organizations, industrial organizations, by demonstrations and by similar organizations, and concerning the relationship of physicians thereto."

The Department of Commerce was commended for the type of medical examiners selected and the high standards in vogue in methods of physical examination in the aviation service.

A resolution providing that the American Medical Association rather than state societies should pay the expenses of delegates was rejected.

A resolution on investigation of advertising hospitals was referred to the Committee on Medical Education and Hospitals, at the same time directing attention to the fact that a list of accredited hospitals is published yearly, and that some 400 hospitals have already been omitted from list on account of unethical practices.

A proposal that all papers read be published was rejected for it was deemed inexpedient to change our by-laws, which would be necessary.

A resolution presented by Dr. Joseph F. Smith that Handbook of Physical Therapy be prepared, brought forth the fact that it is in the "processes" at present and that several chapters have been printed in the Journal.

Establishment of a home for aged physicians was declined on the ground that it was a problem for state societies.

Menace of gasses, carbon monoxide, and those used in refrigeration was the subject of a resolution requesting the Board of Trustees, as a committee, to prepare a report, setting forth the menaces and widely publishing the facts in order that the public may be informed fully regarding the dangers.

The value of inclusion of diagnostic clinics and clinical lectures in the program was stressed.

Section 3, Art. VI, Chapter II of the Principles of Medical Ethics was changed and now reads as follows: "When a patient is referred by one physician to another for consultation or for treatment, whether the physician in charge accompanies the patient or not, it is unethical to give or to receive a commission by whatever term it may be called or under any guise or pretext whatsoever."

Disapproval was voiced of changes in policy of the Red Cross, authorizing its nurses to nurse for those other than regular practitioners.

Amendments to Constitution: Chapter XIX was amended to read: "These By-Laws may be amended by a vote of two-thirds of the House of Delegates." It was changed from three-fourths.

Doctor Joseph F. Smith, Senior Delegate, was appointed a member of the House Reference Committee on Medical Education.

SPEAKER GREELEY: Dr. W. E. Bannen, of La Crosse, are you ready to make an additional report?

DR. BANNEN: The following is an additional abstract of the meeting of the House of Delegates at Portland, Oregon, July 8–12, 1929.

Reports of the various officers were received. Comments were made on the outstanding features, and the reports were duly accepted. The most important of these was the report of the Board of Trustees. One of the outstanding features of this was the cooperation between the American Medical Association and their chemical laboratories, and the American Dental Association, with the issues since September of 1928, dealing with the investigation of dental products. The Dental Association

is having a Council on Pharmacy and Chemistry organized. This work has been valuable in the exposure of nostrums in the dental field. Abstracts on these investigations have appeared in the American Medical Journal.

A good deal of work has been done by the Council in Research Work in Physical Therapy and the rational use of Physical Therapy with promotion of a scientific nomenclature. The Bureau of Investigation has been active and much interest has been shown both by physicians and laymen. In 1918, they received 969 inquiries from physicians and 858 from laymen; in 1928, 4,237 from physicians and 5,743 from laymen. Many of these have been from Better Business Bureaus, national and local, and from newspaper and magazine managers and editors, in order to clear their periodicals of undesirable advertising matter. The directors of the Bureau have given many talks which were broadcast from the American Medical Association headquarters and numerous public addresses on the various phases of quackery and nostrums. The lantern-slide service of the Bureau of Investigation has been used more during the past year than during any previous year.

The Bureau of Legal Medicine and Legislation was active and able to do efficient work on federal income taxes, medicinal liquor, narcotics, the Sheppard-Towner Maternity Act and the retirement of emergency medical officers. An extensive report was given on the annual scientific exhibit and also the report of the Committee on Scientific Research for 1928. The Treasurer's report was presented and accepted, also the report of the Judicial Council. There have been some rejections of applications for fellowship, although compared with the large number of members throughout the United States, this number has been comparatively small. The Judicial Council proposes an amendment to the language of Section 3, Art IV, Chapter 2 of the Principles of Medical Ethics. This statement caused some confusion, as it was held by some to establish fee-splitting as an ethical procedure. Therefore, they recommended that the sentence which reads as follows: "It is also unprofessional to divide a fee for medical advice or surgical treatment, unless the patient or his next friend is fully informed as to the terms of transaction," should be amended so that the section will read: "When a patient is referred by one physician to another for consultation or for treatment, whether the physician in charge accompanies the patient or not, it is unethical to give or to receive a commission by whatever term it may be called or under any guise or pretext whatsoever."

A survey of medical charities was proposed and although the Judicial Committee did not have the necessary machinery for making these economic studies, the American Medical Association will render aid through its Bureau of Legal Medicine and Legislation. There was a complete report on Medical Education. The charters of two medical schools were revoked. Of eighty medical schools, seventy-two were rated as Class A. Two were rated as Class B, and four were Class C, and no longer are included as medical schools. A new medical school was opened at the University of Southern California, which would bring the number of recognized medical schools to seventy-five.

There were forty-five new hospitals included in the Hospital Register. While 103 were added, fifty-three were deemed unworthy of recognition and were withheld or removed from the register. There are 6,852 hospitals at the present time, and it is estimated that 13,500,000 patients were cared for during 1928, not including institutions for the tuberculous, nervous and mental diseases which would make a total of 14,266,000.

Raising of price of the Journal of the American Medical Association from $6.00 to $8.00 was authorized.

On Thursday, the outstanding feature of the meeting of the House of Delegates was the unanimous election of Dr. Wm. Gerry Morgan of Washington as President-Elect. With the nomination of Dr. Morgan, seconds were received from delegations for fifteen states, which was quickly followed by other delegations and no other name was proposed. Dr. Morgan made a very appropriate though impromptu talk, stating that he was a family physician or a bedside doctor, and that he had been a family physician or bedside doctor during his entire years of practice. He spoke of the problem that is agitating the public at the present time, namely, the cost of medical care, and looked forward to the final report of the committee now studying this problem. His viewpoint was that the acuteness of this matter is not so much the results of complaints from ones who are supposed to be suffering from the high cost of being sick but as one springing from the activities of uplifters and other well-meaning though unguided agencies and persons. He stated that so far as he knew the fees received by physicians were not disproportionately high as compared to the rise in cost of other services, but since it was stated that the entire cost of medical care was excessive to some, it was our duty to find out if the fact existed and if so to attempt to correct it in so far as possible, and it was to this problem that he pledged his best endeavors.

Four cities extended invitations to the American Medical Association for the next meeting place: Detroit, Philadelphia, Memphis, and Atlantic City. From the speeches made by favorite ones, one would feel that those cities were the only ones in which it would be desirable to live, practice medicine, or visit during the next meeting of the American Medical Association. Philadelphia and Atlantic City were soon lost in the competition, and the struggle was on between Memphis and Detroit, with Detroit winning.

The House of Delegates extended a very hearty appreciation to the Portland Medical Society and the State Medical Society of Oregon for their

splendid reception, and their many features of entertainment, and an amendment was added in appreciation to the Omnipotent Power for the good weather he had seen fit to confer upon Portland during the stay of the doctors.

SPEAKER GREELEY: You have heard the report of the delegates to the American Medical Association. The reports are ready for acceptance. The Chair will entertain a motion to that effect.

DR. LOTZ: I move the adoption of the report.

. . . The motion was seconded by Dr. Peterson of Independence, and carried . . .

SPEAKER GREELEY: I notice in this House tonight we are honored by guests from Illinois. The first name which comes to my mind is Dr. C. J. Whalen, for many years editor of the Illinois Medical Journal. I shall ask him to address us and to introduce those who are with him from Illinois.

DR. WHALEN: Mr. Chairman and Members of the House of Delegates: It is a pleasure to be with you on this occasion. I do not feel as though I am a stranger. I was born in Dane County, and I have a warm place in my heart for not only Dane County but the members of the Wisconsin State Medical Society. I did not expect to have anything to say. My sentiments on this occasion can be best illustrated by a little personal experience that I had a few years ago.

A friend of mine asked me to take an automobile ride into Wisconsin with him. We were traveling along the right of way. We noticed a commotion of some sort a short distance ahead of us. As we approached it, we found that four people who were traveling along the highway had been struck by a train and distributed quite generally along the right of way. They were not killed but much messed up, some of them unconscious. As they were lying there in this condition, a Jewish peddler came along. He took in the sight, went to the man who seemed the least injured, shook him and said, "My friend, was you hurt?"

The fellow shook his head, unconsciously.

"You are not dead?"

He again nodded or indicated that he was not dead.

"Has anybody been here?"

He again shook his head.

"Was the claim agent of the road here?"

"No."

"Do you mind if I lie down with you?" (Laughter)

In spite of my kindly feeling toward the medical profession of the state of Wisconsin, I have a very high regard for the membership I hold in the Illinois State Medical Society. I feel, and I do not say this in a boastful way, that we in Illinois have the most alert and active state medical society in existence, certainly as active and alert as any of the state societies. A great many of the innovations that have been taken up and acted upon by the American Medical Association originated with the alert medical profession of Illinois.

We have, in Illinois, and your Secretary's remarks brought it to my memory tonight, the most difficult legislative problems to overcome of any state in the union, unless we except the great state of New York. There has not been a session of the legislature in the state of Illinois, for a couple of decades at least, in which there have not been introduced in the legislature from 100 to 150 bills of a medical nature. And for a period of twenty-five years there has not been placed upon the statute books of our state a single piece of medical legislation inimical to the medical profession of the state. When you take into consideration the character of the people of the big cosmopolitan city, you will readily understand that it has been an enormous task to overcome the vicious legislation that is contemplated. I have served on the legislative committee in times gone by. Somehow or other we made a fairly good record. After I left the committee and younger blood took up the problem, they have been even more successful than we older fellows who were in the game originally.

Illinois is one of the few states that has not a medical examing board made up of mixed practitioners. We are free from any entanglements in that respect. We have a medical board that passes upon all licensures. The members of the examining board are not humiliated, as many states are, with having our members sit upon the board with cultists.

Illinois is one of the three states that had the foresight not to enact the Sheppard-Towner Bill. It required an enormous amount of effort on the part of the medical profession, but somehow we succeeded in inducing the members of the legislature to see the danger of the viciousness of legislation. I think we are given credit throughout the medical world with having headed off compulsory health insurance in this country. It was due to the effort of a very few men in the medical profession in the United States that this vicious trend was frustrated in its very early incipiency. And so down the line. I feel that the state society with which I have been connected since I saw fit to leave Dane County has done a great deal for the medical profession throughout the United States.

I was glad to hear the report, too, tonight which indicated that Wisconsin has been able to do a great many of the things we are trying to bring about in Illinois. I thank you, gentlemen, for the opportunity of being with you. (Applause)

SECRETARY CROWNHART: Dr. Whalen, will you not introduced to us those from the state of Illinois who honored us by coming here tonight?

DR. WHALEN: I might say further I was given to understand if I would pilot three or four or five of the distinguished members of the Illinois official family I would not be called upon to make any remarks. I came up here as sort of a chaperone for Dr. C. P. Reed, President of the Chicago Medical Society. By the way, the Chicago Medical Society is the largest local medical society in the world. Dr.

Frederickson, who is president of the State Society, Dr. Mundt, who has been president of the Illinois State Society, and who has held all the honors that the medical profession of Illinois could bestow upon him.

SPEAKER GREELEY: We are glad to welcome these gentlemen to our meeting tonight. I did not get the point of Dr. Whalen's story. I do not know why Dr. Whalen should compare himself to the gentleman he told about in the story. In looking over the group, I do not see why he should think we were like the messed up bunch of humanity on the right of way. We will plead guilty to his soft impeachment. (Laughter)

The next order of business is the election of the Committee on Nominations. In accordance with the usual custom, this committee will be composed of twelve members of this House, each member representing a Councilor district. I shall ask the Secretary to read the list of societies of the various districts. Will the delegates from those counties rise, when the list is completed, and nominate one from among themselves to be a member on the Nominating Committee.

SECRETARY CROWNHART: First District: Dodge, Jefferson and Waukesha Counties.

Second District: Kenosha, Racine, and Walworth Counties.

Third District: Dane, Columbia, Green, Rock and Sauk Counties.

Fourth District: Crawford, Grant, Iowa, La Fayette, and Richland Counties.

Fifth District: Calumet, Manitowoc, Washington–Ozaukee and Sheboygan Counties.

Sixth District: Brown–Kewaunee, Door, Outagamie, Fond du Lac, and Winnebago Counties.

Seventh District: Juneau, La Crosse, Monroe, Trempealeau–Jackson–Buffalo and Vernon Counties.

Eighth District: Marinette–Florence, Oconto and Shawano Counties.

Ninth District: Clark, Green Lake–Waushara–Adams, Lincoln, Marathon, Portage, Waupaca and Wood Counties.

Tenth District: Barron–Polk–Washburn–Sawyer–Burnett, Chippewa, Eau Claire and Associated Counties, Rusk and Pierce–St. Croix Counties.

Eleventh District: Ashland–Bayfield–Iron, Douglas, Langlade, Oneida–Forest–Vilas and Price–Taylor Counties.

Twelfth District: Milwaukee County.

Will the First District make its nomination?

DR. WILKINSON (Oconomowoc): I nominate Dr. Bachhuber, of Mayville.

SPEAKER GREELEY: Any further nominations? (None)

SECRETARY CROWNHART: The Second District.

DR. KELAND: I nominate Dr. Nott, of Racine.

SECRETARY CROWNHART: Is he a delegate? Dr. Adams, of Kenosha, is the only delegate in your district, present, apparently.

DR. KELAND: I nominate Dr. Adams, of Kenosha.

SECRETARY CROWNHART: The Third District.

DR. SCHMELING (Columbus): I nominate Dr. Mauermann, of Monroe.

SPEAKER GREELEY: Any other nominations? (None)

SECRETARY CROWNHART: The Fourth District.

DR. MCDOWELL: I nominate Dr. Betz, of Boscobel.

SPEAKER GREELEY: Any further nominations? (None)

SECRETARY CROWNHART: The Fifth District.

DR. LYNCH (Allenton): I nominate Dr. Fiedler of Sheboygan.

SPEAKER GREELEY: Any further nominations? (None)

SECRETARY CROWNHART: The Sixth District.

DR. R. L. COWLES (Green Bay): I nominate Dr. Marshall, of Appleton.

SPEAKER GREELEY: Any further nominations? (None)

SECRETARY CROWNHART: The Seventh District.

DR. C. C. VOGEL (Elroy): I nominate Dr. Gundersen, of La Crosse.

SPEAKER GREELEY: Any further nominations? (None)

SECRETARY CROWNHART: The Eighth District.

DR. GATES: I nominate Dr. Duer, of Marinette.

SPEAKER GREELEY: Any further nominations? (None)

SECRETARY CROWNHART: Ninth District.

DR. CHRISTENSEN (Wausau): I nominate Dr. Erich Wisiol of Stevens Point.

SPEAKER GREELEY: Any further nominations? (None)

SECRETARY CROWNHART: The Tenth District.

DR. HALGREN (Menomonie): I nominate Dr. Kinsman, of Eau Claire.

SPEAKER GREELEY: Any further nominations? (None)

SECRETARY CROWNHART: The Eleventh District.

DR. T. J. O'LEARY (Superior): I nominate Dr. Smiles, of Ashland.

SPEAKER GREELEY: Any further nominations? (None)

SECRETARY CROWNHART: The Twelfth District.

DR. KRUEGER (Cudahy): I nominate Dr. Powers, of Milwaukee.

SPEAKER GREELEY: Any further nominations? (None) Nominations now being completed, the Chair will entertain a motion that the nominees be declared the choice of this House as members of the Committee on Nominations.

DR. WENSTRAND (Milwaukee): I make such a motion, Mr. Chairman.

. . . The motion was seconded by Dr. O'Leary, of Superior, and carried . . .

SPEAKER GREELEY: As you know, the Nominating Committee will offer nominations for the office of President-Elect, Speaker and Vice-Speaker of the House of Delegates, and select the place of meeting for next year. Is it the desire of the House at this time that the Committee will also consider nomina-

tions of a delegate to the American Medical Association to succeed Dr. Smith of Wausau and an alternate to succeed Dr. R. E. Mitchell, of Eau Claire, whose term expired, or do you wish to proceed to the nomination and election of those officers at this time?

DR. DAWSON (Rice Lake): I would move that the election of delegates and alternates to the American Medical Association be referred to this committee.

. . . The motion was seconded by Dr. McDowell and carried . . .

SPEAKER GREELEY: The next order of business is the election for the offices of Councilor. The terms of the following councilors expire at this meeting: Fifth District, Drs. Edward Evans, of La Crosse; Eighth District, T. J. Redelings, of Marinette; Ninth District, Joseph F. Smith, of Wausau; Tenth District, H. M. Stang, of Eau Claire; and Fifth District, J. L. Shaw, of Manitowoc, resigned.

The Secretary will explain the procedure for nominations, as set forth in his letter to the delegates.

SECRETARY CROWNHART: As I have set forth in my letter to the delegates, while the Constitution provides that the Councilor shall be elected by the House of Delegates, it has been the custom for a number of years that the delegates from the districts affected get together in this hall during a five-minute recess and caucus among themselves, and bring forth a nomination to the House. The district may nominate one or may nominate two if there is a minority report.

I am in receipt of a letter from Dr. James A. Evans, of La Crosse, informing us of his father's illness. He states it is his father's wish that his resignation as councilor be accepted at this time, as his term expires, and that this House, particularly the delegates from his district, select from among themselves some one else for this office.

I am also in receipt of a letter from Dr. J. L. Shaw, elected from the fifth district last year, in which he states that in view of the fact that he is leaving for a vacation to be gone a large part of the summer and has indefinite plans for the future he begs to offer his resignation as Councilor of the district and begs the House to elect at this time some one to succeed him, to fill the unexpired time ending in 1931. So we have five councilors to elect.

. . . A five-minute recess was declared . . .

SPEAKER GREELEY: May we have nominations of delegates from the Seventh District?

DR. VOGEL (Elroy): The Seventh District nominates Dr. Spencer Beebe, of Sparta.

SPEAKER GREELEY: Are there other nominations from the floor? (none).

What is your pleasure?

DR. VOGEL: I move the nomination be accepted from the Seventh District.

. . . The motion was seconded by Dr. Gundersen and carried . . .

SPEAKER GREELEY: Nominations from the Eighth District.

DR. DUER (Marinette): The Eighth District wishes to place in nomination Dr. T. J. Redelings to succeed himself.

SPEAKER GREELEY: You have heard the nomination. Are there any other nominations? If not, the Chair will declare Dr. Redelings elected as Councilor of the Eighth District.

Nominations from the Ninth District.

DR. POMAINVILLE (Wisconsin Rapids): I nominate Dr. Joseph F. Smith to succeed himself.

SPEAKER GREELEY: Are there any other nominations? If not, the Chair will declare Dr. Smith elected.

Nominations from the Tenth District.

DR. DAWSON (Rice Lake): The Tenth District nominates Dr. Stang to succeed himself.

SPEAKER GREELEY: Any other nominations? If not, the Chair will declare Dr. Stang elected.

Nominations from the Fifth District.

DR. TURGASEN (Manitowoc): The Fifth District nominates Dr. A. H. Heidner, of West Bend.

DR. LYNCH (Allenton): I nominate Dr. J. E. Reichert, of West Bend, but since Washington–Ozaukee County is already represented, I withdraw the nomination and second the nomination of Dr. Heidner.

SPEAKER GREELEY: Any further nominations? If not, the Chair declares Dr. Heidner elected.

The Chair will now call upon Dr. Karl W. Doege, our President, to address the House on matters he may wish to call to the attention of the delegates at this session.

PRESIDENT DOEGE: Mr. Speaker and Members of the House of Delegates: There are just two things that I wish to call to your attention, which after some consideration on my part, together with that of some of my friends and members to whom I have spoken, seem to deserve your consideration and your advice.

You remember that in the President's Page some months ago I advised the selection of a scientific secretary or editor to assist in editing our Wisconsin Medical Journal. The reasons for this recommendation were set forth in that paper, and it will not be necessary to recall them to your mind again today. I will, however, call your attention to the fact that it is one of those recommendations and one of those steps toward progress, like the one which Mr. Crownhart mentioned a little while ago, which will not materialize in any pecuniary value, in any pecuniary gain to you in a very short time. It is one of those recommendations which, in my opinion, if adopted and if followed out and worked practically will, within the course of years, be bound to aid in the raising of the standards of the practitioner of medicine in our state in a way that will be noticeable not only among yourselves but all over the United States.

Our Journal is being edited by three very able men. As I have gone through the state during this last year everybody seems satisfied with the Journal. This, of course, does not mean that because we are

satisfied we should rest on our laurels and remain satisfied. Because a thing is good is no reason why it cannot be made better. Therefore, in view of the fact that we have seen such wonderful results in the lay activity of Mr. George Crownhart, as Secretary for our Society, in lay, economical, and legislative ways, and many other ways of which he has spoken this evening, it seems to me that it is possible or very probable that if we had an official who would give part of his time to increasing the scientific activities in our state there might be enhancement in county and district meetings.

I mean, by that, he should be acquainted with the scientific medical activities in the state and encourage and promote those that are inclined to scientific work, to match one city against another, to connect our State University more practically with our county meetings, with town meetings and district meetings, to tell us and advise us constantly what is new, what can be done in the furthering of our knowledge as physicians. Furthermore, he could be chief managing editor of our Journal.

Our present managing editor is Mr. Crownhart. While he does that work wonderfully well in the way he is adapted and understands best, it is hard to understand how he would be able to select scientific articles and make a harmonizing selection in each issue. I, therefore, think that if we would employ a man who is adapted for that work, a physician who would spend part of his time along the lines as I have sketched them just now, it would aid greatly in raising the standards of the medical profession in this state.

I spoke to the Council this afternoon about the matter and after some consideration and discussion, the Council thought there was merit in it and they have appointed a committee which will investigate. If we could find such person, I believe it would be of tremendous benefit to the Society. Of course, it means a salary. It means additional expense. It means the raising of dues to some extent. How much these dues would be; how much this expense would be, I do not know.

It is not worth while to get a man unless he is a very good one, but I feel the benefit which will come out of such an arrangement will fully compensate us for the extra sacrifice we will have to make. I will not put that in the form of a recommendation or resolution, but simply place it before you as something to be thought about. You will, no doubt, hear from the committee the Council selected today, who will further inform you what they think about the practicability of this idea.

The second thing I wish to mention to you is whether it would be advisable for this state to recognize the certificate of the National Board of Medical Examiners. You know we have a national board of examiners which gives a very thorough examination. One would think that our National Board examination would be of a quality that would come up to the best and most exalted state of the union. There are now forty states and territories that have recognized the national certificate. Those which have not recognized those certificates are considering recognition now and trying to plan legislation in such a way that it will harmonize with their local state conditions.

I have here a list of states that have recognized the national board and among them I see Idaho, Illinois, Iowa, Minnesota, Missouri, Nebraska, New York, Pennsylvania, and others. Some of these boards have made additional exactions. For instance, if a man who holds a diploma of the National Board applies in their state for admission they will write to the National Board and ask for data and look over his papers. New York requests a personal interview with the applicant.

There are many minor things that some of these states required before they adopted the recognition of this board. I feel that our state should have the matter under consideration and hope they will see fit to recognize the certificate of the National Board of the United States.

These are the only two things that I think would be of some benefit to our Society and to our state. We are proud of having a progressive state society. In many things our state has done, recommended by our Society, we have gained a national reputation and national recognition.

It is to be hoped, especially in connection with the first item I mentioned, a scientific managing editor, that if we were to adopt that plan it would also redound to the benefit of our state and our whole medical society. (Applause)

Speaker Greeley: I wish to present to the House of Delegates of the Wisconsin State Medical Society, Dr. Frederick Gaenslen of Milwaukee, our President-Elect.

President-Elect Gaenslen: Mr. Speaker and Members of the House of Delegates: After listening to all these able reports and speeches, and especially to the very agreeable report of the Treasurer, I feel that I have nothing especially to say. No song can be so sweet as a budget well balanced. I am going to reserve my ammunition for my address on Friday. I would say, however, that the keynote of my talk on Friday will be preventive medicine.

I feel that the welfare, the health of the community is largely, or should be almost entirely in the hands of the profession. This is both a privilege and a duty, and whoever does that work best, in his hands the work will lie.

Organizations are at work now whose purpose it is to safeguard the health of the community, and I believe the cooperation of the physicians at large with these various institutions will redound to the best for the community.

As I sat here this evening and noted the condition of our affairs, I was greatly impressed with the fact that they were very ably conducted. We have gone through a great amount of business in a very able manner, and I feel that Mr. Crownhart is managing his job very well, indeed. That means

a good organization, and with this good organization we can accomplish the results we are after.

I would say just one word more, and that is in order to conduct an organization ably, sound financing is necessary. And I would bespeak favorable consideration of the contemplated raising of the dues. Without a sound budget organization, work must fall short of the desired goal. I shall now submit appointments for the various committees.

In place of Dr. A. W. Rogers, whose term on the Committee on Scientific Work expires this year, I would propose Dr. W. S. Middleton of Madison.

In place of Dr. Dexter H. Witte on the Committee on Public Policy, Dr. Carl Harper of Madison.

In place of Dr. Fairfield, who has resigned, I would propose Dr. S. M. B. Smith of Wausau.

On the Editorial Board, no changes are made.

On the Committee on Medical Defense, Dr. Nott's term expires this year, and Dr. W. C. Becker, of Watertown, has been selected.

On the Committee on Medical Education in Hospitals, Dr. Jermain's term expires, and I would propose Dr. Francis Murphy, of Milwaukee.

On the Committee on Medical Economics, in place of Dr. T. J. O'Leary, whose term expires, Dr. Thaddeus Smith, of Neenah.

On the Committee on Public Health and Public Instruction, in place of Dr. R. E. Mitchell, whose term expires, Dr. Charles M. Gleason, of Manitowoc.

SPEAKER GREELEY: You have heard the nominations of the President-Elect. These nominations must be confirmed by a vote of the House of Delegates. Is it your wish to vote seriatim on these nominees, or do you wish to vote on all of them on one ballot? The Chair will entertain a motion.

DR. BACHHUBER (Mayville): I move the House approve the nominations.

. . . The motion was seconded by Dr. Mauermann and carried . . .

SPEAKER GREELEY: The House is now ready for new business. Any resolutions which a delegate may wish to present should be offered at this time, so they may be referred to the proper committee for consideration tomorrow evening.

DR. GUNDERSEN (La Crosse): I would like to offer a resolution, commending the able work of Dr. Evans, of La Crosse for his years of service in the Society.

SECRETARY CROWNHART: With the consent of the Chair, we will treat that as a privileged resolution. If you will bring it in tomorrow night, we will act on it then. Has any one else a resolution in mind? If you do not have it worded, you can explain the gist of it at this time, so the Committee on Resolutions can act upon it.

Mr. Chairman, so that the members will completely understand, the report of the officers which you heard tonight is referred to a special committee of your house appointed by the Speaker. They will report tomorrow night their recommendations, and at that time their recommendations are open to a very full discussion, consideration from the floor, and action. This also applies to the reports of the Committee on Reports of Standing Committees and the report of the Committee on Resolutions.

A report of the Committee on Nominations, as you will remember, is made at the Thursday morning session.

Mr. Chairman, four years ago, when this Society considered the question of increasing the dues, which question, by the way, goes to the Committee on Resolutions, who will make their report tomorrow night, it was the consensus of opinion at that time it would be well to have a free and open discussion of the subject immediately, so that the committee might have all that information in its mind in wording a resolution to be acted upon by this House. I think, Mr. Speaker, it would be well to have a perfectly free and open discussion at this time.

SPEAKER GREELEY: As you know, the Council has recommended an increase in dues from ten to fifteen dollars. The meeting is now open for discussion of this question, in which we hope every one will take part if he has anything to say pro or con.

DR. BEEBE: I suppose it is always a question whether a man should present his own views or his county's views, and I am representing what I believe to be my county's views, perhaps, rather than my own. I have not given this matter enough thought. I presume if it is recommended by our Councilors that it is probably wise. I will say for my own county I believe if they were to vote upon it they would vote against it.

Times are hard in the country. You may not believe it from the looks of me, wearing this beautiful new suit, but times are hard in the country and five dollars means a lot to the men in the country. It means a lot, I believe, to many of the young chaps just getting through school and meeting the maximum expense at a time when they have not much money. On the other hand, I think fifteen dollars does not begin to measure the value of this Society to any man. It is merely a matter of whether or not we can afford that extra overhead. It is a matter also, I think, as to whether we can afford to lose fifty or a hundred old men. There are two men in my county whom I believe will drop out because of the added five dollars.

Friends, I would be glad, indeed, while I am not a rich man—I would be glad, indeed, to pay the dues of those men. But you know I would be suspected of giving them a commission. I will leave that up to the interpretation of the Councilors and the Secretary.

I am speaking simply from the point of view of the fellows in my county. Let me tell you something about our county and another county adjacent to it. A year ago one of our past presidents made this assertion to me in a letter. We were arguing some of the things we argue, as we did last year. He said, "Beebe, where is the country doctor who does not take in at least $750 a month and probably two or three times that amount?" Those are the very words he wrote.

I went to the income tax collector of our district last spring and made inquiry as to the income of the doctors in a county adjacent to us, a county twice as wealthy as ours. The average net income of the men in that county was less than $3,000.

There is a very biased misapprehension about the conditions in the country. I had a very wonderful talk with Dr. Olin West, Secretary of the American Medical Association, one day in his office, one of the finest gentlemen I have met.

I believe there is an appalling lack of understanding on the part of our higher officers in regard to the situation in the country. Gentlemen, the situation in the country is bad. It may be as difficult in the city, but I want to tell you the average income of the men in the country is small, exceedingly small. If I should give you the average income of the men in my county, where we have a fine hospital, you would be surprised to see how small it is.

As far as we are concerned, we are happy, but if I were to represent and vote tonight on this proposition as I know the men in my county would like to have me vote, I would vote against the appropriation. I thank you. (Applause)

Dr. M. G. Peterman (Milwaukee): I would also register an objection against increasing the dues. Times are just as hard in the city, and I think for the young man starting into practice today the overhead is something which causes him considerable worry. While he may get a great deal more service if he pays fifteen dollars dues, he could probably get a lot more service out of a Pierce-Arrow when he has to buy a Ford. If the Society were short of funds, if there were some good reason for raising the dues, perhaps we would be justified in making a change, but since the reasons advanced are for the purpose of expansion, I feel it is time to stop and see how far a State Society should expand.

For instance, in the matter of $22,000, and the present budget requiring the utmost consideration to make it cover the activities mentioned. Any budget of $22,000 should require a great deal of consideration. If the budget ends up with a small balance in favor, well and good. Why not continue? So far as further activities are concerned, for instance, a scientific editor of the Journal: there again we might question the purpose of a State Journal. Certainly there are today more national and international medical journals, self supporting, entirely satisfactory, than any one man can read. It hardly seems advisable to raise the standard of the Wisconsin Medical Journal to add to the tremendous literature which we already have. If the State Journal contents itself with reporting the state meeting, perhaps publishing the Blue Book and saving considerable expense, publishing case reports of general interest, public news and other events of general interest to the men in the state, has it not fulfilled its function?

Why, therefore, shoulder a further expense of $2400 a year. If a Conference of Secretaries is desirable, highly desirable, why not ask each county to send its secretary to the state meeting and pay his expenses? If there is a demand for a woman's auxiliary, the demand should come perhaps from the ladies and if such an organization would justify its existence it ought to be self supporting. If there is no great demand for it, if it cannot be self supporting, we might well question the advisability of such an organization. (Applause)

Dr. Rolla Cairns (River Falls): My position is a good deal like the position of Dr. Beebe. I feel a great deal of sympathy for what he has said. Somewhat like Dr. Beebe, I come from near the Minnesota line. I am almost from the state of Minnesota. I am very much further from Madison than most of those here, and from the various places of meeting. Very few from our county society ever get to the state meetings. A great majority of our members do not realize what the State Society is doing for them. Many of them have criticized it before now very severely, and at least two of our members have dropped out on account of the present dues. I feel sure we will lose more members if the dues are raised further.

We have, in our society, placed two of our older members on the honorary list. Some of the men who are not on our honorary list could well be put on the list. They feel the present dues, and do not appreciate what the Society is doing for them. I feel quite sure that a number of these men will drop out with any further increase in dues.

Speaker Greeley: The Chair would like to hear from some member of the Council.

Secretary Crownhart: The discussion ought to be very free.

Dr. A. A. Pleyte (Milwaukee): I asked myself three questions, and wrote them down. These questions, I think, before concluding the discussion, should be asked of each member. Each one of us ought to ask ourselves questions of a similar nature.

Question Number 1. Would it be worth while to increase the dues by one-third and possibly lose 100 or more members in the state?

Question Number 2. Do we really want or do we actually need all the service we are getting, nearly all of which cost money? Are economies affected in all possible ways?

Question Number 3. Should we continue and support a rapid expansion policy? Cannot we have what is actually necessary and make reasonable progress by curtailing expenses as far as possible and by adopting a more slow policy of expansion?

When I answered those questions to my own satisfaction, I came to this conclusion: I believe that with the present dues collected from the larger membership we can do as well or better than we would if we collected more dues from a smaller membership. I believe the present dues can be made to cover the expenses of the most carefully prepared budget which would include all essential services. (Applause)

Dr. E. O. Ravn (Merrill): One of the previous speakers spoke about old men dropping out on ac-

count of raising the dues. Is not there some method of keeping them in with the present dues, on recommendation of the local society, and the young men paying the increased dues, the active men.

Dr. Lynch (Allenton): I was instructed to vote for the raise in dues, but if it failed to go through to suggest making a charge for the Blue Book and for the services rendered by the Society.

Dr. Duer (Marinette): I want to say a few words about this matter, because the discussion so far seems to be one-sided. Personally I should like to see the dues raised. That is not because we have lots of money in Marinette, because we have not. Our people are all poor and do not have much money to spend. From reports I have had from a friend of mine who lives in Milwaukee, I supposed things were different there. I am surprised that the Milwaukee men this evening have reported they do not want a raise in the dues. We always hear this complaint when any suggestion is made to raise the dues. Every one squeezes that old dollar. Every one of you knows that little paltry five dollars will come back to you a dozen times through the efforts of the State Society after you pay it in. You know in dollars and cents the past year that our Secretary has succeeded in reducing the narcotic tax, two dollars, if you have a prescription license, ten dollars reduction, twelve dollars a year. How much are you paying in dues? Ten dollars. All right, you have made two dollars and it has not cost you a penny.

To come back to the original point about the Milwaukee delegation, my friend in Milwaukee told me he had a confinement in Milwaukee which brought him the price of a Ford. In Marinette we do not get much for our work, and do not get the price of a Ford. But that little five dollars is so small compared to what you get from the State Society that I think it is stretching it a point to try to economize to the extent of five dollars and lose many times the amount through the failure to get what we otherwise could get from our State Society. I am decidedly in favor of raising the dues. And although the matter has not been taken up in our county society, I do not think we will lose a single member in our county and I do not know of any place where fees are lower than they are up in the North.

Dr. Cowles (Green Bay): It seems rather out of place to me that we should sit around here and dicker about five dollars a year, when you think of it as a monetary consideration. I am sure if I voted to increase the dues I would be severely criticized by the society. It seems to me we should decide whether we want additional help in the State Society and whether we want to expand and take on additional expense.

If the delegates do decide that the Society could give a good deal more service by raising the dues, then let the delegation go back and sell the idea to their own society before doing this. I am sure the way the societies feel at the present time the increase in dues would be entirely out of place.

Dr. Marshall (Appleton): I was instructed as a delegate from my society, Outagamie County, that they were heartily in favor of increasing the dues. As it now stands, we have three members in our society for whom we pay dues. The members feel that they will be repaid in every way for the increase in the amount of dues. They do not feel that they will lose anything in membership as far as our county is concerned.

Dr. Mauermann (Monroe): We have not had a meeting since I received the notice from our Secretary, but I spoke to a number of our members in our own Society and also to the president of our Society. The last thing he said was, "Mauermann, when you go up there, be sure to vote for a raise in dues."

I do not think we will miss any members or lose any members by raising the dues, and we certainly have been well repaid for the two dollar increase. I think probably some members will bear me out that we lost a few members when the dues were raised. Of course, there will be some kickers and there will be some kicks. I spoke to a doctor recently who had come from California and asked him what the dues were in California. He said, "Sixty dollars a year, and we are well satisfied."

I am in favor of raising the dues, and a good many members in my society are. I think we will get it back not only a dozen fold but a hundred fold in the service we get.

We elect our officers because we think they are best fitted. If they recommend this, why should not we accept the recommendation and vote for it. I am heartily in favor of raising the dues. I think if some of the members who have spoken against raising the dues would go less to the theatre and save a few fifty-cent pieces they could well afford to pay the five dollars extra.

Dr. A. W. Rogers (Oconomowoc): I happen to be a member of this committee sent out to discover a gold mine. Inasmuch as we could not find a gold mine the next thing was to raise the dues. I think there would have been just as much contrary discussion if the suggestion had been two instead of five. I believe at any time in the future, if the committee came in with the suggestion of raising the dues, irrespective of times, there would be just exactly the same opposition. I think there are two things operating here. One is that the rank and file of the medical society do not have a proper appreciation of what the State Society and the Journal are doing for them. There have not been enough questions asked along that line. George has mentioned a few items.

The larger our dues, in a reasonable way, the more you are going to get, the greater the return on your investment.

The other is the slogan of the retiring President. Are we satisfied and are we going to remain satisfied? Some of the speakers have actually preached retrenchment, a step backward. Wisconsin has stood for progress in pretty nearly every line of activity. Is the medical profession of Wisconsin going to

preach retrenchment and step backward? The Waukesha County Medical Society is perfectly agreeable to this raise. I do not believe we are going to lose an appreciable number of members. It has not happened in the past, and times have been much harder than they are at present.

DR. FIEDLER (Sheboygan): I am reminded of a meeting in Green Lake five or six years ago when the dues were raised from five dollars to ten dollars a year. There was the same argument. Just the same discussion took place as is taking place this evening. The dues were raised from five to ten dollars, and instead of losing members the Society has increased its membership continually since then, and the Society has made wonderful progress in that period of time.

It is rather remarkable that those county societies that instructed their delegates should favor the increase in dues. I think perhaps we are a little bit frightened about this extra five dollars in dues. The State Plumbers Association have an organization whose dues are fifteen dollars a year. The beauty parlor operators have an association whose members pay fifteen dollars a year. I do not know just what the dues are in some of the other trades, but I have an idea that they are better than that. In the medical profession, we expect to receive a great deal more service, without any question. I do not think we will lose any members. I think the real question before the House of Delegates is whether the Society wants to go on and expand its program, or whether we are going to stay where we are and are going to get into this rut for the years to come.

I think it would perhaps be a good idea to go back to our societies and actually have a vote on the matter.

DR. CUNNINGHAM (Platteville): Dr. Pleyte made the suggestion that if we raised the dues five dollars we would lose members. Five years ago there was no objection and the membership changed very little. At that time, this Society was not able to get along with the dues we were receiving. It was necessary, in order to carry on the organization, that we increase the funds to carry on the organization. Suppose you increase the fund at the present time five dollars, making it in the neighborhood of ten thousand dollars to keep our present membership.

There may be a time when we will need those funds. But, as I see it, we do not need them at the present time, and I think when we do this society will be ready to vote the increased dues. Until we do need them, I believe in keeping the dues as they are. We have a little to add to our reserve each year.

The only thing that might be carried on in the expansion way would be as our President has suggested, and that would be to get a scientific editor. But do we want a scientific editor with a salary of $10,000 a year at the present time. The Society publishes our articles as they are presented at the meeting. That would have to be carried on. When you take the Medical Journal, the articles or papers that are presented at the medical meetings, then take what is added by our Secretary and Editorial Board, it seems to me there is but little to add at the present time by a scientific editor.

As I said before, I believe the Society would be ready and willing to pay five dollars or ten dollars extra when they see they need it. But at the present time I do not see that we need it.

SECRETARY CROWNHART: Mr. Speaker, I have the pleasure of presenting to the members of this House Dr. Olin West, Secretary and General Manager of the American Medical Association. (Applause)

DR. OLIN WEST (Secretary of the American Medical Association): Mr. Chairman, it is a great pleasure to be here. I always thoroughly enjoy my visit to Wisconsin. I have a very high respect for the Wisconsin Medical Society and for the men who compose it. (Applause)

DR. PETERSON (Independence): I hesitate to rise and express my opinion in regard to the raising of dues. Still I can see that the committee is to be guided by the expressions made here this evening. We have heard considerable pro and con, and I think the little back woods society of Trempeleau–Jackson–Buffalo ought to be heard from. In the past several years, we have heard Dr. Evans point to our society as being a live one. While the discussion has been going on, I have called to my mind the different members of that society. I have wondered how many of them would drop out if the dues were raised from ten to fifteen dollars. I am frank to say I cannot see that any of them would.

We have had the extension courses in pediatrics this summer and have had a good attendance every week. We have paid for the course. When we think of all the good we have received, the great work of our State Secretary, the great amount that he saved for us in different ways, I think it would be a good plan to go on and have him do further good for the Society.

I do not know whether it would be best to have the scientific editor. The Journal is pretty good, as I see it. But maybe it could be improved. I was wondering whether it would be a good plan to compromise on this matter. Instead of making the increase of five dollars, make it three and make some of the improvements. During the next year or two discuss the matter at home with the members of the different societies, and then if you found you needed still more, in a year or two it could be raised to five dollars.

Personally, I am in favor of making the raise to five dollars, but there is some merit in some of the arguments of those apposed. Probably we will not need it at the present time. That is why I suggest we compromise, making it thirteen dollars instead of fifteen dollars, and two or three years from now take the next step.

DR. MILLER (Milwaukee): It seems to me, from the discussion, that many of the delegates have come

to this convention uninstructed, and any vote by the delegates would not necessarily represent the expression of opinion of that society. I would just offer one suggestion to one delegate, that they raise the fees in their county instead of the dues.

I make one other suggestion, that this matter be placed on the table; that the county society be given an opportunity to go into it more thoroughly and return with the ability to express the views of each county society.

DR. BACHHUBER (Mayville): I feel like the gentleman of Milwaukee. The question is: Do we want a strictly scientific journal. We want a state journal, a journal that tells us about this Society. We have our Archives of Medicine, International Clinics, and the American Medical Association Journal. I think possibly with two or three exceptions the men in Dodge County would pay the increased fees. But the big thing would be to go on with the scientific journal program.

We have been doing pretty well. Let us abide by Dr. Miller's suggestion; get the opinion of our county society and see what they favor for next year.

DR. ADAMS (Kenosha): When I go back and tell my associates that the dues have been raised five dollars, the first thing they will fire at me will be this: What are we going to get for the five dollars? If I should go back and say that the paramount discussion at the state meeting of the House of Delegates was whether we should raise the dues to five dollars, and then go on and tell them the prospects of good, the improvements that might be made, try to win them over to voting for this, and come back another year and vote for it, perhaps that would be a solution of this problem that we are discussing here tonight.

Personally, so far as the five dollars is concerned, I doubt very much whether our men or any men are going to drop out because of an increase of five dollars in the dues, if they are informed through the Journal what they are going to get for it.

DR. SMILES (Ashland): I am a better listener than speaker, for the reason that I stayed up until three o'clock this morning trying to earn my dues for next year, no matter what they may be. I started at seven o'clock this morning and drove down here, something like 330 miles. A good deal of that road had been deluged by four days of rain, so that my idea of the difference between ten and fifteen dollars now is not very clear.

Our back woods country up there has lost this year, I note by the reports, about five members. It is simply a question similar to what one of the other doctors said. The men are out of touch with the state meeting and do not realize what they are getting for that money. A lot of us feel the State Medical Society is costing us absolutely nothing, that we are getting a lot more than we are paying.

Personally, I am quite convinced that my local society will lose some members. I have been president and secretary in former years, but in spite of that I would be very much in favor of the fifteen dollar dues. I might be personally interested, because it is just at the particular time in life when the kiddies are growing up, demanding more money. I expect this increase comes to me easily and naturally when I consider long trousers, music lessons, and that sort of thing. I would vote for my society the fifteen dollar dues. I thank you.

DR. T. WILLETT (West Allis): I think the biggest asset to the Medical Society is not the amount of money we have or the men in the business, but the new men who are going to come in. It is not a question in my mind whether the men in the Society now would stay or not. It is whether the new men would come in. The biggest asset we have is the new blood that would come in. I know a number that could not come in with the dues at fifteen dollars. It is not a matter of whether we want it or not. We men are all rich and can afford the five dollars. But it is the matter of keeping out the young men who want to come in and are undecided as to whether they are going to spend the ten dollars. The dues at fifteen dollars will decide it for them and they will not come in.

Many of you older men could drop out without any particular detriment to the Society, but the young man is what we need.

SPEAKER GREELEY: Dr. Bardeen, can you educate the young man to a fifteen dollar standard?

DR. CUNNINGHAM: I move that this be laid on the table until we see fit to increase the dues.

SECRETARY CROWNHART: This is automatically referred to the Committee on Resolutions. The Committee reports tomorrow night and at that time any action you wish to take is in order.

Mr. Speaker, if the discussion is finished, the Secretary would like to make a few remarks. In the first place, a Secretary working in the office of your Society, thinking of your Society, thinking of the general practitioners who compose the large number of the members of your Society, working in the legislature, trying to pass this bill and that bill, thinking of your material welfare, of your scientific progress, of your progress generally, as it relates to public health matters and public esteem—it is just simply a natural thing that he gets enthused with the possibilities that he sees ahead of him. You can understand that. You would be in exactly the same position as I am today. And it is for that reason that the report made to you by the Council, emphasized the point that after all the Society could not attain things on money alone, but must have the kindly feeling of the members, and that the decision as to raising dues must really be in your hands.

Your Secretary sees that we have accomplished much; that it cannot be questioned but what we can demonstrate to any member that he has saved forty to fifty dollars a year alone through the Society in the past three or four years.

Your Secretary sees a vast field of work ahead of the Society, which he is interested in accomplishing in your interest. But the officers of the Society must not move ahead of the Society. You are the

ones to decide what you want the Society to do. Instruct your officers and you may be sure they will follow your decision.

Much has been said of a scientific editor of the Journal, a part-time man. Of course, if the dues were increased the committee appointed by the Council this afternoon might give that consideration, very possibly would. But the thing that prompted more than anything else, I think, this recommendation of the Council was the fact that they saw an era in the Society's life closing and a new one opening which called for a harder work, a more difficult work, and yet possibly an even more satisfactory work to the members. At the same time, this new work is something we could only touch on the surface with the present income, so far as we were able to make plans.

Possibly we have not made all the economies we can make. Possibly that criticism is well taken. But the new work to which I refer is placing the medical profession in the position of leadership in Wisconsin in all public health activities. As it is, we hear about things when they are introduced in the legislature, and then must go to the legislature with our recommendation and take our chances. We hear about the movements after they have been established. Even though we are trying now to attain a leadership, we have not attained it; and I am sure that I speak for the Council, particularly the committee which has this in charge, when I say the basis of their recommendation was the real need for money, as they saw it in their discussion, to secure this rightful leadership.

I might cite for you many examples, but, after all, you cannot discuss those things in a very concrete sort of way. We did have in mind the possibility of the Society becoming recognized as leaders in the entire field of public health effort; that all these lay organizations that are very sincerely interested in public health projects would come to the Society, might be brought together by the Society, have the projects thrashed out, the Society giving its opinion and advice where it could, hoping in that way to direct all the movements in a line that will reflect the greatest benefit to the public. And what reflects the greatest benefit to the public will certainly reflect the greatest benefit to the profession.

I might add this one further thought: that many a lay organization has a project that will bring great beneficial results and yet only you as physicians with a background of experience, who have seen one organization after another come up with its projects, its accomplishments and final failures, can stand in a position to inform these organizations that immediate results are sometimes far outweighed by end results.

That is the sort of work your Council had in mind for your Society, a work difficult of demonstration as to results.

The question is: Are the members ready for it at this time, or at any time. Certainly we would like to express the opinion, particularly while Dr. West is here, that the officers are not trying to push this upon you. They are placing it before you for your consideration. The discussion here tonight, I know, is going to be very helpful to this committee and to you in formulating in your own mind what action should follow.

I would like to point out that in appointing this special committee on resolutions I think our Speaker of the House, Dr. Greeley, has done a piece of work that is very fine, for he made the five members all representative of the general practitioner, those who make up the large proportion of your membership and who have ever been the backbone of this Society.

I want to assure you when the time comes to vote on this, and your Secretary will not speak about it further, we want you to keep in mind the officers are anxious to do what you want them to do and that we hold of greatest value a kindly feeling towards the Society. The officers are waiting for you to outline in what direction the Society shall move. They will ever be mindful of the fact that it is the cooperation of the members everywhere, and particularly during the legislative session, that after all attains the results. Thank you, Mr. Speaker. (Applause).

SPEAKER GREELEY: Is there any further business to come before the meeting?

. . . General announcements by the Secretary. . . .

DR. MAUERMANN: I move we adjourn.

. . . The motion was variously seconded and carried, and the meeting adjourned at ten p. m. . . .

Adjournment.

WEDNESDAY NIGHT SESSION

September 11, 1929

The meeting convened at seven p. m., Speaker Greeley presiding.

SPEAKER GREELEY: The meeting will please come to order.

Before proceeding with the business of the House of Delegates, I want to present to the House the Editor of the Journal of the American Medical Association, Dr. Morris Fishbein. (Applause)

The first business is the call for committee reports, two of which we did not hear from last night. Is Dr. Stang in the house? (not present) Is Dr. Joseph Lambert here? (not present) We will ask for the report of the Committee on Reports of Standing Committees later.

We will hear from the Committee on Credentials. Is Dr. Bradbury of Neilsville here? If not, we will pass on to the next report.

SECRETARY CROWNHART: Mr. Speaker, before we pass on, may we not have a motion that the attendance of the House as compiled by the registration slips on this table constitute the roll of the House.

DR. ADAMS: I so move.

. . . The motion was seconded by Dr. Mauermann and carried . . .

SPEAKER GREELEY: Is Dr. Smiles here? Dr.

Smiles, will you give the report of the Committee on Reports of Officers?

DR. C. J. SMILES: Mr. Speaker: Your Committee on Reports of Officers move the following be accepted by the House of Delegates:

(a) That portion of the report of the chairman of the Council (par. 2) relative to the Endowment Fund in its entirety as published in the Journal August, 1929, and also the amendment offered by Dr. Rogers in his report of September 10 that Section 11, Chapter 6 be added to the by-laws, making the Council the administrator of the Endowment Fund.

(b) That the report of the Secretary be accepted with the recommendations that:

1. Value of packet library be brought repeatedly to the attention of members.
2. Extension lecture courses be made to reach a greater number of members than ever before.
3. The information as to the cause of malpractice suits be fully investigated and this information be made to reach each member in an educational way.
4. Inasmuch as the past six and one-half years has been a "corrective effort period" in the Secretary's work and he has directed and assisted in the accomplishment of much needed legislation, all of which was for the direct public good, we recommend that the House stand behind a policy of progress as we are now at the very door of the "period of directive effort," where much is still to be done.

(c) Report of the Treasurer be accepted.

(d) Recommendation of President Doege that the House of Delegates go on record as favoring recognition by law of reciprocity relation with the National Board of Medical Examiners.

C. J. Smiles
Robert L. Cowles
Gunnar Gundersen

SPEAKER GREELEY: You have heard the report of the Committee. What is your pleasure?

DR. MAUERMANN: I move its acceptance.

. . . The motion was seconded by Dr. Marshall, of Appleton, and carried . . .

SECRETARY CROWNHART: Before proceeding, I think it would be well to formally adopt that amendment to the by-laws referred to in the report, recommended for adoption. If adopted, a new section would be added to the duties of the Council to read: Section 11. The Council shall manage the Foundation Fund of the Society, exercising as broad a discretion in the use thereof as shall be permissible by law, and the terms under which the moneys or properties of said fund were received. Moneys and properties given, granted, devised or bequeathed to the Society in trust for the advancement of medical science may be accepted or rejected by the Council, and when accepted shall constitute the Foundation Fund. In the discretion of the Council, any of such moneys or properties or earnings thereof may be returned to the donor or grantor or to his estate or relatives.

SPEAKER GREELEY: You have heard the amendment as read.

DR. CUNNINGHAM: I move it be adopted.

. . . The motion was seconded by Dr. Gramling, of Milwaukee . . .

SPEAKER GREELEY: Any discussion? If not, all in favor of the motion will signify in the usual manner by saying, "Aye"; contrary, "No". The motion is carried.

Has Dr. Bradbury come in?

DR. BRADBURY: The Committee on Credentials have examined the credentials of the delegates and find them to be as reported to the Secretary.

DR. MAUERMANN: I move the report be accepted.

. . . The motion was seconded by Dr. Powers and carried . . .

SPEAKER GREELEY: The House is ready for the report of the Committee on Resolutions.

DR. A. J. WIESENDER: One resolution came before the committee in the matter of increasing the dues from ten dollars to fifteen dollars for 1930. The report is as follows:

To the Members of the 1929 House of Delegates:

We, the Committee to whom is referred the resolution of raising the annual dues of the Wisconsin State Medical Society from ten dollars to fifteen dollars recommend:

That this measure be laid on the table for one year; and that the delegates ascertain the views of their respective societies, so that the question may be voted upon at the next annual meeting; and that the President or Secretary of the State Society be invited to attend and speak before the members of each county society at the meeting at which the question is to be discussed.

A. J. Wiesender
J. F. Mauermann
G. R. Duer
A. S. Thompson

SPEAKER GREELEY: You have heard the report of the Committee on Resolutions in regard to the matter of raising the dues. What is your pleasure?

DR. WRIGHT: I move it be adopted as read.

. . . The motion was seconded by Dr. Thompson, of Milwaukee . . .

SPEAKER GREELEY: Is there any discussion on the motion?

DR. POWERS: Will you state the purpose of the motion? Is it that it be accepted and placed on file or that it be adopted?

DR. WRIGHT: That it be adopted.

SPEAKER GREELEY: If there is no further discussion, we will put the question. All in favor, will signify in the usual manner by saying, "Aye"; opposed, "No". It is carried unanimously.

Have you a further report, Dr. Wiesender.

DR. WIESENDER: No further report.

SPEAKER GREELEY: We are ready to hear the report of the Committee on Reports of Standing Committees.

DR. S. J. SEEGER: The report of the Committee

on the Reports of Standing Committees is as follows:

The House of Delegates:

Your Committee begs to report as follows:

The adoption of the reports of the following committees which have been published in the August and September, 1929, issues of the Wisconsin State Medical Journal is recommended:

a. Committee on Public Policy.
b. Committee on Health and Public Instruction.
c. Committee on Medical Defense.
d. Editorial Board.
e. Committee on Medical Education and Hospitals.

The Committee wishes especially to commend the work of the Committee on Public Policy in securing an appropriation of $5,000 a year to the State Board of Medical Examiners to permit them to employ a full time investigator to weed out major forms of quackery in this state.

Dr. S. J. Seeger
Dr. C. C. Vogel
Dr. J. C. Betz

SPEAKER GREELEY: You have heard the report of the Committee on the Reports of Standing Committees. What is your pleasure.

DR. MCDOWELL: I move the report be adopted.

. . . The motion was seconded by Dr. Thompson, of Milwaukee, and carried . . .

SPEAKER GREELEY: Any new business to come before the meeting?

DR. GUNDERSEN (La Crosse): I should like to introduce a resolution.

"WHEREAS, Dr. Evans, of La Crosse, the past president of this organization, for many years chairman of the Council, and at all times a tireless and enthusiastic worker for all that is best in medicine, has through illness been forced to resign his position of leadership in this organization; be it

"*Resolved*, that he be given a vote of appreciation and gratitude for his years of service to the State Medical Society of Wisconsin, with a sincere hope and wish for a speedy recovery from his illness and that this resolution be made a part of the minutes of this meeting."

DR. SPENCER BEEBE (Sparta): This is the inner circle of the larger family, and I want to say just a few very personal words in regard to Dr. Edward Evans, who is retiring, as you know, from the Council, from the seventh district.

You might be interested in knowing that thirty years ago I was a pretty young, struggling doctor in Elroy and Dr. Edward Evans was the practicing physician and surgeon in La Crosse, practicing alone. It was his custom each year to take a month off and do post graduate work and to ask some young man from the country to come and try to take his place.

One year I took his work. I rattled around in his chair. That is about all I could do, my friends. When I succeed him in his position this coming year, I cannot hope to match his talents of heart and hand and mind. I can only hope to match his zeal.

While the resolution which was introduced came from the general body of the Society, it seems to me we men who represent our district here a little word from home might not be inappropriate. The old saying is: "A prophet is not without honor save in his own country." That is not true of Dr. Edward Evans and never has been true.

We who represent the district tonight as delegates and alternates wish to make this little expression in regard to our friend, Dr. Evans:

Dr. Edward Evans, a man who has rare talent of heart and mind; a mind richly stored with the finest in literature and art and science; a man unafraid of unremitting labor, provided that labor might increase his efficiency in the art of medicine and surgery, and augment his capacity for personal and public service; a valiant crusader for right and an ardent defender of the finest traditions of our profession; a loyal friend and neighbor; a citizen of whom any city might well be proud; a physician whom every man among us delights to honor.

DR. ADAMS: Chairman, representing a county some distance away from Dr. Evan's county, I want to say I have known him for twenty-five years, and I think it is most fitting and proper that this resolution be adopted.

SPEAKER GREELEY: I believe this resolution needs no motion and that it may be carried by a rising vote.

. . . The members arose to pay tribute to Dr. Evans . . .

SPEAKER GREELEY: Any further new business to come before the House of Delegates?

DR. THOMPSON (Milwaukee): I wish, in behalf of the Milwaukee delegation, and I know the House of Delegates, to present the following resolution:

"*Resolved*, that whereas death has called from our ranks one of our most able and respected members; and

"WHEREAS, this member had ever been in the forefront of leadership in his professional ability; ever alert to encourage and help the younger members of the profession; beloved by his confreres and patients, and well known for his deep, human sympathy;

"*Therefore*, the State Medical Society of Wisconsin expresses its sincere loss in the death of Ernst Copeland, and directs that this resolution be inscribed upon its minutes.

DR. GRAMLING: I move the adoption of the resolution.

. . The motion was seconded by Dr. Mauermann . . .

SPEAKER GREELEY: Does any one wish to speak on this resolution? All those in favor, signify in the usual manner by saying, "Aye"; contrary, "No". It is unanimous.

DR. F. E. CHANDLER (Waupaca): I wish to announce that in conversation with one of our former presidents, Dr. L. H. Pelton, he expressed sorrow that he could not be present tonight and during this session. He is entirely blind and is some eighty-

two years of age, but he is with us tonight in spirit.

SPEAKER GREELEY: I shall ask the Secretary to send Dr. Pelton a telegram expressing the regret of this Society at his inability to be present at this meeting.

Any further new business?

SECRETARY CROWNHART: For the information of the members of the House, in accordance with custom, the election of officers will be held tomorrow morning at eight o'clock. At that time, the Committee on Nominations presents its sealed report. May I emphasize at this time that the nominations of the Committee on Nominations does not preclude additional nominations from the floor.

SPEAKER GREELEY: If there is no further business to come before the house tonight, a motion for adjournment is in order.

DR. ADAMS: I move we adjourn. (Variously seconded)

. . . The meeting adjourned to seven forty-five p. m. . . .

Adjournment.

THURSDAY MORNING SESSION

September 12, 1929

The meeting convened at eight a. m., Speaker Greeley presiding.

SPEAKER GREELEY: The meeting will please come to order.

DR. PETERSON (Independence): Mr. Speaker, I move you that the attendance slips constitute the attendance of the House.

. . . The motion was seconded by Dr. Betz and carried . . .

SPEAKER GREELEY: The business before the House this morning is the report of the Nominating Committee.

SECRETARY CROWNHART: Mr. Speaker, the Nominating Committee gave the Secretary this sealed report yesterday. Before the report is opened, Mr. Speaker, may I again emphasize the fact that nominations coming from the Nominating Committee do not preclude nominations from the floor.

. . . Secretary Crownhart read the sealed report . . .

SECRETARY CROWNHART: In regard to the place of meeting, unless the House makes some other provision the next annual meeting will be held at Milwaukee, under the rules adopted last year, in which they said they would alternate between Madison and Milwaukee, unless the House wishes to go some other place.

SPEAKER GREELEY: You have heard the report of the Nominating Committee. Unless there is objection, we will proceed seriatim. The first is President-Elect. The nominee is Dr. A. J. McDowell, of Soldiers Grove.

DR. SCHMELING (Columbus): I move that the rules be suspended and that the Secretary cast the unanimous ballot of the delegates for Dr. A. J. McDowell, of Soldiers Grove for President-Elect of our Society.

. . . The motion was seconded by Dr. Fiedler and carried unanimously and the Secretary cast the ballot . . .

SPEAKER GREELEY: We will hear from Dr. McDowell.

DR MCDOWELL: Mr. Speaker and Delegates: This comes, of course, as a surprise to me, and I appreciate the honor. I have always felt it a great honor to belong to this great Society, and I appreciate this as being a still greater honor. I fully understand, of course, the standards which have been set by my illustrious predecessors, and I can only hope by your sympathy and cooperation to fill the position which has been tendered me with credit to yourselves and the Society as a whole.

I thank you for this honor. (Applause)

SPEAKER GREELEY: The next office is that of speaker of this House. Dr. S. J. Seeger, of Milwaukee, is the nominee. Are there other nominations?

DR. PETERMAN: I move suspension of the rules and that the Secretary cast the unanimous ballot for Dr. Seeger.

. . . The motion was seconded by Dr. Mauermann and carried unanimously; the Secretary cast the ballot . . .

SPEAKER GREELEY: Is Dr. Seeger here? If so, I shall ask him to take the chair and conduct the remainder of the meeting.

. . . Dr. Seeger assumed the duties of Speaker. . . .

SPEAKER SEEGER: The next order of business is the election of a vice-speaker. The nominee is Dr. C. A. Harper, of Madison. Any other nominations?

DR. MAUERMANN: Mr. Chairman, I move that the rules be suspended and the Secretary cast the unanimous ballot for Dr. Harper for vice-speaker.

. . . The motion was seconded by Dr. Prentiss, of South Wayne, and carried; the Secretary cast the ballot . . .

SPEAKER SEEGER: Dr. Harper is declared elected vice-speaker of the House of Delegates.

Dr. Joseph F. Smith of Wausau is elected delegate to the American Medical Association.

DR. FIEDLER: I move suspension of the rules and that the Secretary cast the unanimous ballot for Dr. Joseph F. Smith as delegate to the American Medical Association.

. . The motion was seconded by Dr. Marshall, of Appleton, and carried unanimously; the Secretary cast the ballot.

SPEAKER SEEGER: Dr. Smith is declared reelected to the office of delegate to the American Medical Association. Alternate delegate to the American Medical Association, Dr. M. D. Bird, of Marinette.

DR. POWERS (Milwaukee): Mr. Chairman, I move suspension of the rules, and that the Secretary be instructed to cast a unanimous ballot of this House for Dr. Bird.

. . . The motion was seconded by Dr. Adams,

of Kenosha, and carried unanimously; the Secretary cast the ballot . . .

SPEAKER SEEGER: I declare Dr. Bird elected as alternate delegate to the American Medical Association.

SECRETARY CROWNHART: Before we proceed further may I announce that the Secretary will send each delegate and alternate and also the councilors a mimeographed note of all the actions of the House, which we will get out sometime during the next week.

SPEAKER SEEGER: Has any one a suggestion to make with regard to a place of meeting other than Milwaukee. You understand the meetings are to alternate according to the rules, between Milwaukee and Madison, unless some one has some other proposal, to be acted upon by this House.

DR. ADAMS: This does not require a motion. It goes there, does it not?

SPEAKER SEEGER: If there is no proposal, I shall interpret it as the wish of the House that the next meeting be held in Milwaukee in compliance with the rules.

Any new business, Mr. Secretary.

SECRETARY CROWNHART: The desk of the Secretary is clear, Mr. Speaker.

SPEAKER SEEGER: Has any one any new business to bring up at this time.

DR. FIEDLER: I move we adjourn.

. . . The motion was seconded by Dr. Betz and carried and the meeting adjourned sine die at eight-thirty a. m. . . .

Adjournment.

MINUTES OF THE COUNCIL

Memorial Union Building, Madison, 2:00 P. M., Tuesday, September 10, 1929

1. It was moved by Dr. Smith, seconded by Dr. Blumenthal, that the chair dispense with the calling of the roll. Carried.

2. It was moved by Dr. Blumenthal, seconded by Dr. Pope, that the minutes of the January meeting of the Council, as printed in the February, 1929 issue of Wisconsin Medical Journal, be approved. Carried.

3. It was moved by Dr. Gaenslen, seconded by Dr. Doege, that the Council formally approve the mail ballot permitting the secretary to purchase an ediphone. Carried.

4. It was moved by Dr. Smith, seconded by Dr. Connell, that the mail ballot be approved which instructed the secretary to protest raising the tariff on surgical instruments. Carried.

5. It was moved by Dr. Gaenslen, seconded by Dr. Pope, that the Council approve the mail ballot authorizing the formation of the Auxiliary and approving the constitution. Discussion. Carried.

6. It was moved by Dr. Pope, seconded by Dr. Cunningham, that the reports of the auditors on the accounts of the treasurer and the secretary be accepted. Carried.

7. It was moved by Dr. Blumenthal, seconded by Dr. Harper, that permission be granted for the combining of the Rusk County Medical Society with the Eau Claire and Associated Counties Medical Society. Carried.

8. The secretary presented to the Council a request from a large pharmaceutical house representing the dispensing pharmacists, wholesale, that the Council approve a questionnaire to be sent to the members of this society. After a full discussion, it was moved by Dr. Connell, seconded by Dr. Smith, that the Council does not approve of issuing such a questionnaire in the name of the society. Carried.

9. The secretary presented a second request from the National Food Bureau for the introduction of a resolution on the subject of food fads. It was moved by Dr. Connell, seconded by Dr. Smith, that the Council do not introduce such a resolution into the House of Delegates. Carried.

10. Pursuant to the constitution the secretary referred a question of Editorial Board policy to the Council. It was moved by Dr. Cunningham, seconded by Dr. Redelings, that it be the sense of the Council that the Editorial Board has control of all articles appearing in the Journal. After a full discussion the motion was carried.

11. The secretary presented to the Council the request for the appointment of delegates to the Pharmacopeia convention to be held in Washington next May. It was moved by Dr. Smith, seconded by Dr. Pope, that this be laid over until the January meeting and that in the meantime the secretary ascertain from the University of Wisconsin and Marquette University what delegates, if any, they were to appoint. Carried.

12. The chairman of the Council submitted to the Council the proposed amendment to the by-laws authorizing the foundation fund. It was moved by Dr. Harper, seconded by Dr. Cunningham, that the Council accept the amendment and instruct the chairman of the Council to refer it to the House of Delegates. Carried.

13. The secretary presented to the Council a request from a member who had a complete file of bound journals of the American Medical Association that such journals be purchased by the society. After discussion it was the sense of the Council that the society having no library facilities of its own do not purchase the journals but that the secretary communicate with various interested parties in Wisconsin to the end that they be purchased and maintained within the state.

14. A full discussion on the present status of the Journal ensued together with a discussion of the scientific progress of the society. It was moved by Dr. Gaenslen, seconded by Dr. Smith, that the chairman of the Council appoint a committee to

study with the Editorial Board the suggestions of President Doege looking toward improvements in the scientific work and publications of the society. Carried.

Adjournment at six-thirty p. m.

* * *

Second Meeting of the Council, 12:00 noon, Memorial Union Building, Madison, September 11th.

1. It was moved by Dr. Smith, seconded by Dr. Cunningham, that in budgeting the society's expenses for the years to come, the expenses of delegates to the American Medical Association be limited to their railroad fare and pullman fares. After a full discussion, the motion was put and carried.

2. Dr. Smith reporting for the Committee on Redistricting declared that it was the sense of the committee that this subject matter be laid on the table for a year to permit a full discussion in the county societies affected.

3. Chairman Rogers announced as the Committee on Scientific Work of the society and its publication, Dr. F. J. Gaenslen, chairman; Dr. K. W. Doege, Marshfield; Dr. Rock Sleyster, Wauwatosa; Dr. W. D. Stovall, Madison, together with members of the Editorial Board.

4. It was moved by Dr. Blumenthal, seconded by Dr. Greeley, that the subscription of the society to the Crusader be not continued for the time being after the current obligation of $300 for the year ending September 1929, be paid and that it is the sense of the Council that this constitutes the limit of its present indebtedness. Carried.

Adjournment.

* * *

Third Meeting of the Council, Thursday noon, September 12th.

Pursuant to the constitution the Council met at noon. There being no business on its desk, adjournment was taken.

(Signed) J. G. Crownhart,
Secretary.

Approved:
Arthur W. Rogers, M. D.,
Chairman of the Council.

Attorney General Rules County Judge May Deny Applications for State Hospital if Care Can Be Given Better in a Nearer Hospital

A county judge has no authority under the law to commit an indigent person, in need of medical care, to any hospital other than the State General Hospital, but if he feels that the care can better be given at a local hospital he can deny the application. In such event the indigent person may then receive medical attention under the general provisions of our poor law.

Such was the ruling of the Attorney General's Department during September to a question submitted by the District Attorney of Shawano County. The ruling, published in October, follows:

Indigent, Insane, etc.—Wisconsin General Hospital—Under secs. 142.01 *et seq.*, Stats., judge if, under facts stated, he finds that operation for indigent person can be performed at nearer hospital than Wisconsin general, may, in his discretion, deny application to commit such patient to general hospital.

September 10, 1929.

R. H. Fischer,
District Attorney,
Shawano, Wisconsin.

You have directed my attention to sec. 142.01, Stats., and ask for an interpretation. You state that you would like to know if, under the provisions of this section, any indigent person suffering from a deformity or ailment can be sent to the Wisconsin general hospital thereunder; that the particular difficulty arises as to whether, in case any other hospital can give the same kind of treatment for an ailment, that would foreclose the judge from sending the person to the Wisconsin general hospital. You give as a concrete example the following:

A woman who is suffering from a cancer of the breast is indigent. The same operation can be performed at a near hospital and she can be sent there for medical attention under the general provisions as an indigent person. The question is whether the judge may send her under the above facts to the Wisconsin general hospital.

Sec. 142.01 provides:

"A person having a legal settlement in any county in this state who is afflicted with a deformity or ailment which can probably be remedied or advantageously treated, if he or the person liable for his support is financially unable to provide proper treatment, may be treated at the Wisconsin General Hospital at Madison."

You will note that this statute states that a person therein described "may be treated at the Wisconsin General Hospital."

Sec. 142.02 provides that a formal application is necessary, and under sec. 142.03 the court is required to make an investigation.

Sec. 142.04 then provides:

"If the court shall be satisfied that the required facts exist and that the person should be treated at the Wisconsin general hospital, he shall so find and enter an order granting the application. If the court is not so satisfied, he may make further investigation. If the court does not find the required facts, he shall enter an order denying the application. Upon granting the application, he

shall ascertain from the superintendent of the hospital whether the person can be received as a patient, and if he can the court shall certify his order to the hospital and to the county clerk."

You will note that, under the provisions of these last quoted sections, the court must be satisfied that the required facts exist and, also, that the person should be treated at the Wisconsin general hospital before making an order granting the application. If the court finds that the person should not be treated at the Wisconsin general hospital, then he is required to deny the application. There is no provision which authorizes the court to commit the person to any other hospital.

The matter is left to the discretion of the court. If it appears to him that the operation may better be performed in a nearer hospital, he may deny the application and such indigent person may then receive medical attention under the general provisions of our poor law. See sec. 49.145.

State Board of Medical Examiners Employs Drews as Full Time Investigator; Twenty-Three Licensed in September

That Mr. Walter Drews, for many years with the department of Vital Statistics of the State Board of Health, has been appointed as full time investigator for the Board of Medical Examiners, was the announcement of Dr. Robert E. Flynn, Secretary, following the September meeting of the Board. The Board was allotted $10,000 from the general fund of the state for such work until June 30, 1931, as result of a special appropriation advocated by the Board and State Medical Society and approved at the recent legislative session. Mr. Drews' appointment has been certified by the Civil Service Commission and he is already doing field work for the Board. "The license of Dr. F. A. Walters, Stevens Point, was revoked because of his conviction for manslaughter," reported the Secretary.

Twenty-three physicians were licensed by the Board at its meeting held during the sessions of the State Society at Madison in September. The lists of licentiates follow:

BY EXAMINATION

Name	*School of Graduation*	*Year*	*Present Address*
Atanasoff, Jos. R., M. D.	Marquette U. School of Med.	1929	Mil. County Hosp., Wauwatosa, Wis.
Cremer, Annabel B., M. D.	Marquette University	1929	Rochester State Hosp., Rochester, Minn.
Erickson, Milo T., M. D.	Northwestern U. Med. School	1928	Barneveld, Wis.
Faust, John H.	Northwestern U. Med. School	1929	Spirit Lake, Iowa
Goedecke, Raymond, M. D.	U. of Wis. Medical School	1928	West Salem, Wis.
Hardgrove, Maurice A., M. D.	Columbia Medical School	1928	103 Third St., Fond du Lac, Wis.
Hamilton, Edith G., M. D.	Univ. of Alberta	1926	2702 Lisbon Ave., Milwaukee, Wis.
Monaghan, Leo James, M. D.	Marquette University	1929	Mil. County Hosp., Milwaukee, Wis.
Poser, Edward F., M. D.	Univ. of Ill. Med. School	1926	636 Church St., Evanston, Ill.
Richards, Raymond R., M. D.	Univ. of Ill.	1927	Whitehall, Wis.
Rosenbaum, Moses K., M. D.	Yale Med. School	1928	1918 Teutonia Ave., Milwaukee, Wis.
Rydell, Otto E., M. D.	University of Wis.	1928	2129 John Ave., Superior, Wis.
Szafranski, Casimir J., M. D.	Marquette Med. School	1928	997 Fillmore Ave., Buffalo, N. Y.

LICENSED BY RECIPROCITY

Name	*School of Graduation*	*Year*	*Rec. From*	*Present Address*
Clothier, Elton Forrest, M. D.	U. of Minn. Med. School	1928	Minn.	3431 Chicago Ave., Minneapolis, Minn.
Ebert, Reinhold O., M. D.	Cornell U., New York	1925	N. Y.	Marion, Wis.
Felland, Oscar M., M. D.	U. of Minn. Med. Dept.	1927	Minn.	Bovey, Minn.
Garvey, John Louis, M. D.	U. of Michigan Med. Dept.	1920	Mich.	368 Kensington Blvd., Milwaukee, Wis.
Grimm, Joseph J., M. D.	Loyola U. of Medicine	1929	Ill.	1936 No. Clark, Chicago, Ill.
Oliver, James B., M. D.	Northwestern Univ.	1929	Wash.	317 Watson Street, Ripon, Wis.

Osterheld, Roger G., M. D.	Boston Univ.	1924	New Hamp.	108 W. Chicago St., Stoughton, Wis.
Rohrer, Christian A., M. D.	U. of Minn. Med. Dept.	1927	Minn.	414 So. 5th Ave., Minneapolis, Minn.
Rosekrans, Milton C., M. D.	U. of Minn. Med. Dept.	1928	Minn.	Hixton, Wis.
Rosekrans, Sarah D., M. D.	U. of Minn. Med. Dept.	1927	Minn.	Hixton, Wis.
Western, Frederic B., M. D.	U. of Ill. Med. Col.	1928	Ill.	1900 Washington Ave., Racine, Wis.
Wilker, William F., M. D.	U. of Iowa Med. Dept.	1928	Iowa	Iola, Wis.

LICENSED BY RECIPROCITY AT JUNE MEETING

Name	*School of Graduation*	*Year*	*Present Address*
Atkinson, Norman E., M. D.	Kentucky Med. School	1898	420 Vail St., Michigan City, Indiana.
Bachelle, Cecil V., M. D.	Rush Medical School	1900	RFD #3 Delavan, Wisconsin.
Bradford, Carl Wm., M. D.	Marquette Med. School	1927	Hudson, Wis.
Brehn, Herbert Geo., M. D.	St. Louis U. School of Med.	1928	1401 Grand Ave., Racine, Wis.
Chorlog, John I., M. D.	U. of Wis. Med. School	1927	301 S. Pinckney, Madison, Wis.
Diamond, Francis J., M. D.	Loyola Med. School	1927	750 S. State St., Elgin, Ill.
Faber, Samuel J., M. D.	Rush Medical School	1926	Cooper Carlton Hotel, Chicago, Ill.
Hall, Frank Wilford, M. D.	Northwestern Medical	1911	Beloit, Wis.
Heitmeyer, Powis Lee, M. D.	Rush Medical School	1927	Appleton, Wis.
Jean, J. Ted, M. D.	Washington U. Med. School	1928	Three Lakes, Wis.
McDonald, Rob't. E., M. D.	U. of Minn. Med. School	1926	386 Martha Washington Drive, Wauwatosa, Wis.
Northey, Thornton, M. D.	U. of Minn. Med. School	1927	1836 Taylor Ave., Racine, Wis.
Richie, Richard F., M. D.	U. of Buffalo Med. School	1927	Milwaukee Children's Hospital, Milwaukee.
Rinehart, Bert M., M. D.	Hahnemann Med. Col.	1901	Champaign, Ill.
Schoenbeck, Rob't. F., M. D.	Rush Medical College	1923	Savanna, Ill.
Sherman, Cyril F., M. D.	U. of Col. Med. School	1928	59th & Drexel Blvd., Chicago, Ill.
Spooner, Rob't., M. D.	U. of Vienna Med. School	1904	Hedrick, Iowa.
Stein, Clarence C., M. D.	U. of Ill. Med. School	1927	Kohler, Wis.
Stephens, George W., M. D.	Tulane Medical Univ.	1907	575 Layton Blvd., Milwaukee, Wis.
Tomb, Everett H., M. D.	U. of Penn. Med. School	1917	Harbor View Apt., Prospect Ave., Milwaukee, Wis.
Ulrich, Charles F., M. D.	Creighton Med. College	1916	Kenosha Clinic, Kenosha, Wis.
Warrick, Jos. D., M. D.	Chicago Col. of Med. and Surgery	1927	3520 Sherman Rd., Chicago, Ill.
Watson, Wm. A., M. D.	U. of Tenn. Med. School	1914	Mendota, Wis.
Wheelihan, Rob't. Y., M. D.	Northwestern Med. School	1928	84 E. Wis. Ave., Milwaukee, Wis., Suite 1149.
Wier, John S., M. D.	Washington Med. School	1927	11 N. Main St., Fond du Lac, Wis.
Wolf, Rob't. Clifford, M. D.	Creighton Med. School	1928	202 Woodland Ave., Wauwatosa, Wis.
Wright, Cecil Stuart, M. D.	Northwestern Med. School	1923	Wis. Gen. Hospital, Madison, Wis.

LICENSED BY EXAMINATION AT JUNE MEETING

Name	*School of Graduation*	*Year*	*Present Address*
Aszman, Paul E., M. D.	Marquette Medical U.	1929	2200 Cedar St., Milwaukee, Wis.
Baldwin, Raymond M.,M. D.	U. of Wisconsin Med. School	1928	438 University, Farm Pl., Madison, Wis.
Benn, Herbert Putnam, M. D.	U. of Wis. Med. School	1928	Medford, Wis.
Bork, Albert L., M. D.	Marquette Med. School	1929	3722 Burnham St., Milwaukee, Wis.
Braun, Theodore George, M. D.	Rush Medical School	1929	Hudson, Iowa
Brinkman, Walter C., M. D.	Marquette Medical School	1929	2319 West Blvd., Racine, Wis.
Carns, Marie L., M. D.	U. of Wis. Med. School	1927	Madison, Wis.
Churchill, Bernard P., M. D.	Northwestern Med. School	1928	679–6th Ave., Milwaukee, Wis.
Clauson, Carl Theron, M. D.	U. of Wis. Med. School	1928	Bloomer, Wisconsin
Dettmann, Everett F., M. D.	Marquette Medical School	1929	Monroe, Wisconsin
Eisenberg, Louis Abels, M. D.	Loyola Med. School	1929	701–49th St., Milwaukee, Wis.
Forster, John Wilfrid, M. D.	Queens Univ. Toronto, Canada	1928	1604 Regent St., Madison, Wis.

Name	School of Graduation	Year	Present Address
Fromm, Arno H., M. D.	Marquette Medical U.	1929	748–2nd St., Milwaukee, Wis.
Goldenberg, Martin D., M. D.	Marquette Medical U.	1929	1149–16th St., Milwaukee, Wis.
Greene, Henry Lewis, M. D.	U. of Oregon Med. School	1928	Wis. Gen. Hospital, Madison, Wis.
Hitz, John Bernard, M. D.	U. of Penn. Med. School	1928	Phila. Gen. Hospital, Philadelphia, Pa.
Hudson, Leo A., M. D.	U. of Wis. Med. School	1928	Sauk City, Wis.
Jackson, Joseph Warren, M. D.	U. of Col. Med. School	1928	333 N. Randall Ave., Madison, Wis.
Johnson, Ralph B., M. D.	Northwestern Med. School	1928	Lutheran Hospital, La Crosse, Wis.
Johnston, Thomas L., M. D.	Marquette Med. School	1929	Red Arrow Camp, Woodruff, Wis.
Kenney, Howard J., M. D.	Marquette Med. School	1929	Mil. Co. Hospital, Wauwatosa, Wis.
Keppler, Fred Albert, M. D.	Marquette Med. School	1929	Mil. Co. Hospital, Wauwatosa, Wis.
Kriz, George A., M. D.	U. of Penn. Med. School	1928	845 Sherman Blvd., Milwaukee, Wis.
Lane, Francis Ch., M. D.	Marquette Med. School	1929	201 Cottage St., Merrill, Wis.
Lawrence, Bertrand G., M. D.	John Hopkins Med. School	1928	Wis. Gen. Hospital, Madison, Wis.
Lechtenberg, Emil H., M. D.	Marquette Med. School	1929	New Vienna, Iowa
Levine, Abram, M. D.	Marquette Med. School	1929	506–16th St., Milwaukee, Wis.
Martineau, Edward L., M. D.	Marquette Med. School	1929	571 Murray Ave., Milwaukee, Wis.
Morrissy, Martin J., M. D.	Marquette Med. School	1929	68 Walworth Ave., Delavan, Wis.
Murawsky, Wm. Jos., M. D.	Marquette Med. School	1929	1140—46th St., Milwaukee, Wis.
Neubert, Albert D., M. D.	U. of Wis. Med. School	1928	Jackson Clinic, Madison, Wis.
O'Brien, Harold A., M. D.	U. of Wis. Med. School	1928	1300 University Ave., Madison, Wisconsin
Olsen, Arthur H., M. D.	Marquette Med. School	1929	815 Forest Home Ave., Milwaukee, Wis.
Olsen, Maurice, M. D.	Marquette Med. School	1929	1925 Atkinson Ave., Milwaukee, Wis.
O'Malley, William P., M. D.	U. of Wis. Med. School	1928	2818 Highland Ave., Milwaukee, Wis.
Perrin, Stuart H., M. D.	U. of Wis. Med. School	1928	Star Prairie, Wis.
Pessin, Samuel B., M. D.	Marquette Med. School	1929	Mil. Co. Hospital, Wauwatosa, Wis.
Pomainville, Francis J., M. D.	Marquette Med. School	1929	Arpin, Wis.
Popp, Albert, M. D.	Marquette Med. School	1929	2016 Holton St., Milwaukee, Wis.
Quackenbush, Earl C., M. D.	Northwestern Med. School	1929	607 S. Quincy St., Green Bay, Wis.
Reay, George Daniel, M. D.	Marquette Medical School	1929	St. Eliz. Hospital, Youngstown, Ohio
Regan, James R., M. D.	Marquette Medical School	1929	1004 Downer Ave., Milwaukee, Wis.
Schade, Rob't. E., M. D.	U. of Wis. Med. School	1928	2489 Shore Drive, Whitefish Bay, Milwaukee, Wis.
Shaw, Gerald W., M. D.	Harvard Medical School	1928	Waunakee, Wis.
Sours, James Ward, M. D.	Northwestern Medical School	1929	Mil. Co. Hospital, Wauwatosa, Wis.
Stanton, Edward D., M. D.	U. of Wis. Med. School	1928	Wis. Gen. Hospital, Madison, Wis.
Stark, Callistus H., M. D.	Marquette Medical School	1929	628 A. Ave., W., Cedar Rapids, Ia.
Stauff, Glenn R., M. D.	Marquette Medical School	1929	123 Stickney Ave., Wauwatosa, Wis.
Teschan, Rudolph Arnold, M. D.	Marquette Medical School	1929	221 Wis. Ave., Milwaukee, Wis.
Thompson, Rob't. Emerson, M. D.	Marquette Med. School	1929	3001 Wells St., Apt. 201, Milwaukee, Wis.
Thranow, John Albert, M. D.	Marquette Medical School	1929	476–39th St., Milwaukee, Wis.
Tomkiewicz, Nina O., M. D.	Marquette Medical School	1929	Box 331, R. R. 2, South Milwaukee, Wis.
Turkeltaub, Solomon M., M. D.	U. of Wis. Med. School	1928	724–16th St., Milwaukee, Wis.
Unterholzner, Lawrence J., M. D.	Marquette Med. School	1929	Mineral Point, Wis.
Weller, Edgar Alonzo, M. D.	Marquette Medical School	1929	Amherst, Wis.
Wilkinson, Edward D., M. D.	Marquette Medical School	1929	765–51st St., West Allis, Wis.
Wojta, William C., M. D.	Marquette Medical School	1929	52 Cottage Ave., Fond du Lac, Wis.
Oberfeld, Harold H., M. D.	McGill Medical University	1929	246–12th St., Milwaukee, Wis.

THE JOURNAL BOOK SHELF

The Conquest of Cancer by Radium and Other Methods. By Daniel Thomas Quigley, M. D., instructor in surgery in the University of Nebraska College of Medicine; director of the Radium Hospital of Omaha. Illustrated with 334 engravings. Price $6.00 net. F. A. Davis Co., Philadelphia, 1929.

Youthful Old Age. How to Keep Young. By Walter M. Gallichan. With an introduction by Thurman B. Rice, M. D., Indiana University School of Medicine. Price $2.50. The Macmillan Company, New York, 1929.

Osteomyelitis and Compound Fractures. By H. Winnett Orr, M. D., chief surgeon of the Nebraska Orthopedic Hospital, Orthopedic Surgeon Lincoln General Hospital, Consulting Orthopedic Surgeon Bryan Memorial Hospital, Lincoln, Nebraska. Cloth $5.00. C. V. Mosby Company, St. Louis, 1929.

Principles and Practice of Electrocardiography. By Carl J. Wiggers, M. D., professor of physiology in the School of Medicine of Western Reserve University, Cleveland, Ohio. With 61 illustrations. Price $7.50. C. V. Mosby Company, St. Louis, 1929.

Gonorrhea and Kindred Affections. Gonorrhea in the Male, Chancroid and Verruca Acuminata by George Robertson Livermore, M. D., professor of urology, Medical Dept., University of Tenn., and Gonorrhea in the Female and Infectious Granulomata by Edward Armin Schumann, M. D., associate professor of obstetrics, University of Pennsylvania. Price $5.00. D. Appleton and Company, New York and London, 1929.

The History of Hemostasis. By Samuel Clark Harvey, M. D., professor of surgery, Yale University; surgeon in chief, New Haven Hospital. With 19 illustrations. Price $1.50 net, Paul B. Hoeber, New York, 1929.

Surgical Pathology. By William Boyd, M. D., professor of pathology, University of Manitoba, Winnipeg, Canada. Second edition, revised and reset. Octavo of 933 pages, with 474 illustrations and 15 colored plates. Cloth $11.00 net. W. B. Saunders Company, Philadelphia and London.

The Collected Papers of the Mayo Clinic and the Mayo Foundation for 1928, Volume XX. Edited by Mrs. M. H. Mellish, Richard M. Hewitt, M. D., and Mildred A. Felker, B. S. Octavo volume of 1197 pages with 288 illustrations. Philadelphia and London: W. B. Saunders Company, 1929. Cloth, $13.00 Net.

Clinical Aspects of Venous Pressure. By J. A. E. Eyster, B. Sc., M. D., Prof. of Physiology, University of Wisconsin; Associate Physician, Wisconsin General Hospital. Cloth, 8vo., 135pp., Macmillan Company, Chicago, $2.50.

BOOKS RECEIVED FOR REVIEW

The Nutrition of Healthy and Sick Infants and Children. For physicians and students. By E. Nobel, professor of the University and first assistant of the Children's Hospital of the University of Vienna; C. Pirquet, late professor of the University and director of the Children's Hospital of the University of Vienna, and R. Wagner, associate professor and second assistant of the Children's Hospital of the University of Vienna. Second revised edition with 78 illustrations (including charts) and 6 tables. Authorized translation by Benjamin M. Gasul, M. D., consulting pediatrist at the Municipal Tuberculosis Sanitarium of Chicago. Price $3.50 net. F. A. Davis Company, Philadelphia.

Interns Handbook. A guide to rational drug therapy, clinical procedures and diets. By members of the faculty of the College of Medicine, Syracuse University. Under the direction of M. S. Dooley, M. D., chairman publication committee. J. B. Lippincott Company, Philadelphia and London.

Clinical Medicine for Nurses. By Paul H. Ringer, M. D., formerly chief of medical service of the Asheville Mission Hospital, N. C., and on staff of Biltmore Hospital, Biltmore, N. C. Illustrated. Third revised edition. Price $3.00 net. F. A. Davis Company, Philadelphia, 1929.

Tularemia. History, pathology, diagnosis and treatment. By Walter M. Simpson, M. D., director of the Diagnostic Laboratories, Miami Valley Hospital, Dayton, Ohio. With 53 text illustrations and 2 colored plates. Price $5.00. Paul B. Hoeber, Inc., New York.

The Treatment of Diabetes Mellitus. With higher carbohydrate diets. By William David Sansum, M. D., Percival Allen Gray, M. D., and Ruth Bowden, B. S. Price $2.50. Harper & Brothers, New York and London.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Secretary, Mr. J. G. Crownhart, 119 E. Washington Ave., Madison, Wisconsin. These new books will be loaned for an inspection period only.

A Study of Masturbation and the Psychosexual Life. By John F. W. Meagher, M. D., neurologist to St. Mary's Hospital, Brooklyn. Second edition. Price $2.00 William Wood & Company, New York City.

An attempt is made by the author to present the subject of masturbation and the psychosexual life in a concise, easily understood fashion. The psycho pathological mechanism is so explained and analyzed to be easily comprehended by parents, teachers and clergymen. Physicians not specially trained in psychopathology might also find many helpful ideas to explain the mechanism of this habit. The book is free from case histories. The matter of treatment is taken up briefly and as one would expect there is little new except that the author emphasizes the importance of sympathy and re-education of the patient. J. L. G.

"The Wisdom of the Middle Course"

Varicose Veins. With special reference to the injection treatment. By H. O. McPheeters, M. D., director of the Varicose Veins and Ulcer Clinic, Minneapolis General Hospital, associate staff of Northwestern Hospital, Minneapolis, Minnesota. Illustrated with half-tone and line engravings. Price $3.50 net. F. A. Davis Company, Philadelphia.

This is a very readable monograph, covering in a comprehensive way, the subject of varicose veins and their treatment by the injection method. This compilation is a resumé of a most thorough investigation of the literature throughout the world—wherever this work has been done—combined with the care and treatment of approximately 800 cases.

The entire subject of varicose veins is presented in an orderly manner, beginning with anatomy, embryology and physiology and progressing through to varicose veins, their complications and treatment. The author submits an overwhelming array of evidence to prove the superiority of the injection over the surgical treatment not only in the ease and facility with which this ambulatory treatment can be given, but in the unquestionably better results obtained. He describes in detail his method of multiple injections at one sitting, designed to produce a practically complete obliteration of all the involved veins. In his work, he prefers calorose (invert sugar solution, Eli Lilly) and uses it in practically unlimited quantity, depending on the severity and extent of the case. His own technique of isolating and collapsing small segments of vein for each injection seems more involved and difficult than are the usual methods employed, but there can be no doubt that the skillful use of this procedure will produce uniformly good results. Throughout this monograph, the author stresses the importance of skill and care in the employment of this procedure and anyone who has had any experience with it at all, realizes the truth of this. The chapters on ulcer cruris and its treatment are valuable contributions to this chronic and more or less intractible condition and should prove interesting to any one who encounters these cases in his practice.

Altogether, this is a decidedly valuable little book and should be read by everyone interested in varicose veins and their complications. C. C. S.

Gynecologic Technic. By Thomas H. Cherry, M. D., professor of Gynecology, New York Post Graduate Medical School and Hospital. With 558 half-tone and line engravings, from photographs and pen and ink drawings by the author. Price $8.00 net. F. A. Davis Company, Philadelphia.

This book is not intended as a text book for students, but rather for the practitioner of medicine who constantly comes in contact with gynecological patients and to the surgeon and gynecologist to help him select proper operative procedures.

This book is divided into three sections. Section one comprises all the standard gynecological operative procedures and also chapters on anesthesia and care of operative gynecological patients.

Section two is called medical technic. This section deals with gynecological examination, venereal infections, diathermy, precancerous conditions, uterine bleeding, mal-positions, sterility and urological complications.

Section three is a resume of the treatment of gynecological conditions usually encountered in the office.

This book contains 558 illustrations drawn by the author himself. The author must be complimented on this task which no doubt meant endless hours of toil, and which has been very well done.

This book is a worth while contribution to the field of gynecology. A. H. L.

Sterilization for Human Betterment. By E. S. Gosney and Paul Popenoe. A summary of results of 6,000 operations in California, 1909–1929. Price $2.00. The Macmillan Company, 60 Fifth Ave., New York City.

This publication covers the subject of sterilization in a more compact manner. No phase of the subject is untouched by the authors. The results of 6,000 operations in California form the basis of their deductions from different angles. Nine appendices cover such phases as the technique of the operations, the law and a bibliography for each chapter. J. L. G.

The Common Head Cold and its Complications. By Walter A. Wells, M. D., professor of Oto-Laryngology, Georgetown University, Washington, D. C. With an introduction by Hugh S. Cumming, M. D., surgeon general United States Public Health Service. Price $2.75. The Macmillan Company, 60 Fifth Ave., New York City.

The author has taken a malady which is rather wide-spread and generally regarded as trivial and has written a small book of 200 pages which is very interesting. He has divided his subject matter into twenty three chapters and takes up everything connected with the common cold. In such a discussion he necessarily includes the sinuses, the adenoids and tonsils. The viewpoint expressed in the book in regard to some of the controversial questions such as the use of vaccine for colds is sane. Not much is said about treatment as the book is designed particularly for laymen.

It seems to the reviewer that the author has done a very good piece of work and if the book were widely read by laymen it would help to combat some foolish notions which are now prevalent in regard to the common cold. L. M. W.

Outline of Preventive Medicine. For medical practitioners and students. Prepared under the auspices of the Committee on Public Health Relations, New York Academy of Medicine; 21 contributions. Editorial Committee: Frederick E. Sondern, Chas. Gordon Heyd, E. H. L. Corwin. Price $5.00. Paul B. Hoeber, Inc., New York City.

This small volume represents a resume of Preventive Medicine written by twenty-one authors every one of whom takes up briefly his own specialty as it pertains to preventive medicine.

JOSLIN -- after 7 years' experience with the use of Insulin, states --

"Deaths from Diabetic Coma should cease!"

"It is high time they should cease, for seven years have gone by since the discovery of insulin and the medical profession has been taught that insulin cures coma unless the patient is moribund. Why not abolish diabetic coma forthwith? This is the easiest and surest method of lowering diabetic mortality." E. P. Joslin: J.A.M.A. **93**:33, 1929.

Dr. Joslin and other authorities have frequently stated that the mortality rate in diabetes may be markedly reduced by the prompt and proper use of insulin.

Insulin Squibb, like other Squibb products, has the merited approval and confidence of physicians everywhere. It is prepared under license from the University of Toronto and conforms to the standards established and maintained by the Insulin Committee.

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Insulin Squibb, 80 units per cc., is distributed in 10 cc. vials only.

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E·R·SQUIBB & SONS, NEW YORK

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.

As the range of the subjects covered is so large necessarily the subject matter in the book is much condensed. However, it serves as a brief summary of what is known in preventive medicine and as such will very likely be of value to medical students and busy practitioners for whom it seems to have been primarily written. L. M. W.

The Collected Papers of the Mayo Clinic and the Mayo Foundation for 1928, Volume XX. Edited by Mrs. M. H. Mellish, Richard M. Hewitt, M. D., and Mildred A. Felker, B. S. Octavo volume of 1197 pages with 288 illustrations. Philadelphia and London: W. B. Saunders Company, 1929. Cloth, $13.00 Net.

This volume consists of 429 papers or references to them which have been produced in the year by members of the staff of the Mayo Clinic and the Mayo Foundation. There are many papers dealing with diseases of the various systems of the body.

The numerous articles on the physiology of the liver and surgery of the gastro intestinal tract are among the important contributions of this volume. Lumbar ganglionectomy and ramisectomy for congenital idiopathic dilation of the colon are described and results reported. There are many articles dealing with the thyroid, pancreas, and spleen, and as usual are excellently written. This volume is well illustrated; as is characteristic of the Mayo Clinic Publications. F. D. M.

Surgical Pathology. By William Boyd, M. D., professor of pathology, University of Manitoba, Winnipeg, Canada. Second edition, revised and reset. Octavo of 933 pages, with 474 illustrations and 15 colored plates. Cloth $11.00 net. W. B. Saunders Company, Philadelphia and London.

The reviewer is one of those who find it difficult to separate the pathology of surgical lesions from pathology in its widest sense. Nevertheless, this volume has very successfully embraced a review and discussion of those conditions of particular importance to the surgeon. It is necessarily limited in scope, so that for more complete knowledge of any one lesion the surgeon or pathologist must necessarily consult other literature. The author's preface makes plain his point of view, namely, to present pathology in a most useful manner to the surgeon, and in that he succeeds very admirably. One might have wished that more space had been devoted to descriptions of the gross lesion, but one must realize that no one can learn gross pathology from a book, and the surgeon can best learn that from carefully observing the tissues and following them through to the laboratory, and comparing the gross picture with the microscopic lesion. It is a regrettable fact that few surgeons are to be found in the surgical pathology laboratories. Too few of them appreciate the value of the microscope, and they have relegated this most important source of information to the pathologist. A surgeon whose pathological information is secondhand can never be a first-rate surgeon. The book is well-illustrated, many of the illustrations having been taken from monographs and other standard works. This is a book to be recommended to young surgeons in the hopes that they will not neglect the most important aspect of their training. It is to be recommended to older surgeons because it is easy to read and will serve to enlighten them on many modern opinions. It is useful to young pathologists and students of pathology, but these latter will demand works of more detailed information. N. E.

Therapeutic Notes

New and Nonofficial Remedies

In addition to the articles enumerated previously, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories:
- Metaphen 2500.

Hollister-Stier Laboratories:
- Bacillus Acidophilus Culture-Hollister-Stier.
- Acne Vaccine.
- Pertussis Bacillus Vaccine.
- Typhoid-Paratyphoid Prophylactic.
- Staphylococcic Vaccine.

Mead Johnson & Co.:
- Sobee.

Sandoz Chemical Works, Inc.:
- Calcium Gluconate-Sandoz.

E. R. Squibb & Sons:
- Diphtheria Toxoid-Squibb, 30 cc. vial.

TRUTH ABOUT MEDICINES

New and Nonofficial Remedies

Ointment Ephedrine Compound.—An ointment containing ephedrine-Lilly (New and Nonofficial Remedies, 1929, p. 166), 1 Gm.; menthol, 0.65 Gm.; camphor, 0.65 Gm.; oil of thyme, 0.0375 Gm.; hydrous wool fat, 5 Gm.; liquid petrolatum 24 Gm.; white petrolatum, to make 100 Gm. Eli Lilly & Co., Indianapolis.

Lilly's Ephedrine Jelly.—It is composed of ephedrine sulphate-Lilly (New and Nonofficial Remedies, 1929, p. 169), 1 Gm.; glycerin, 15 Gm.; tragacanth, 1.5 Gm.; eucalyptol, 0.1 Gm.; oil of wintergreen, 0.005 Gm.; oil of dwarf pine needles, 0.005 Gm.; water to make 100 Gm. Eli Lilly & Co., Indianapolis.

Vioform-Ciba. — Iodochlorhydroxyquinolin. — A substitution compound of anachlor-ortho-hydroxyquinoline resulting from the introduction of one atom of iodine. Vioform-Ciba is used as an odorless substitute for iodoform. It is used as a dusting powder for application to wounds, ulcers, burns, exudative skin eruptions, etc. Ciba Co., Inc., New York.

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Liver Therapy and the Pernicious Anemia Problem*

By WILLIAM S. MIDDLETON, M. D.,
Madison

Such prodigious strides have been made in the management of pernicious anemia in the past few years that it has seemed advisable to hesitate in our forward course to contemplate the effect of liver therapy upon the problem as a whole. To begin with, an appreciation of the scope of the question is essential to a proper understanding of such results. As Minot and his co-workers[1] so aptly phrased it, "pernicious anemia is more than a disease of the blood; it is a process that involves various tissues. The digestive and central nervous systems are also affected and are features as distinct as lack of blood." Admittedly the etiology of pernicious anemia is still the subject for conjecture rather than established fact. It is highly improbable that the complete story of its pathogenesis will be written or the relationship between its several systemic manifestations understood until its etiologic background is fixed. The present viewpoint is best expressed by Minot and Murphy:[2] "Thus, it may be that pernicious anemia is a disease that arises in a predisposed person because of a lack or unavailability in the body of something that permits the proper growth of body cells. The lack of this, which may be a rather specific substance, is perhaps responsible for other lesions than those in the bone marrow; for example, degeneration of the spinal cord. This would be comparable to what occurs in pellagra. There is evidence that achlorhydria exists for a long time before the anemia of pernicious anemia becomes apparent, and thus achlorhydria may play a role in the production of the disease. It is not impossible that the lack of the necessary factor or factors may be secondary to digestive effects due to the achlorhydria." The recent contribution of Castle and Locke[3 4] has a significant bearing upon the question at hand. These investigators withdrew a partially digested meat meal from the stomach of normal individuals; and upon feeding this material, further treated with hydrochloric acid for two hours, to individuals suffering from pernicious anemia responses of the reticulocytes and the erythrocytes similar to those resulting from liver were induced. And now Sturgis and Isaacs[5] and Sharp[6] have found that desiccated hog stomach has an erythropoietic action paralleling that of liver. Such results strengthen the position of a primary gastric responsibility for the trilogy of pernicious anemia; but as yet, then, there is no adequate explanation for the complete clinical and pathologic picture of this condition.

From a clinical viewpoint pernicious anemia is a syndrome characterized by manifestations in the hematopoietic, digestive and central nervous systems. A diagnostic framework of the salient clinical features may be constructed for the general practitioner as follows:

A. Hematopoietic:
   1. Anemia
      a. High color index.
      b. Macrocytosis.
      c. Megaloblasts.
   2. Pigment Function
      a. Lemon yellow pallor.
      b. Icterus index of over 10.
      c. Urobilinogen in urine.

B. Digestive:
   1. Glossitis (bald tongue).
   2. Achlorhydria.

C. Central nervous:
   1. Posterior column involvement (vibratory sense loss).

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2. Lateral column involvement.
3. Combined posterior and lateral column involvement.

DIAGNOSIS

From the standpoint of diagnosis it should be clearly borne in mind that no single feature of the blood picture is pathognomonic for pernicious anemia; that is to say, no detail of the so-called pernicious blood picture escapes duplication in secondary anemias, if they be of sufficient severity. From the practical standpoint the several leads in the blood picture mentioned are highly important nevertheless. The icterus index has proven very helpful in differentiating grave secondary anemias from the true Addisonian anemia. Its simplicity leads to its choice over the van den Bergh test and should recommend it more widely to clinicians. Not only may the determination of the icterus index prove helpful in diagnosis, but also from a prognostic standpoint its fluctuations are of inestimable value. Remissions are forecast by its fall and relapses by its rise. The availability of the urobilinogen test as a guide to the hemolytic process is likewise not sufficiently appreciated. However, in the general experience it has not been as delicate an index as promised. Determinations of the fragility of corpuscles, the volume index and the average cell size are valuable, as are many other collateral observations; but in the busy practice where such studies must of necessity be limited to the most helpful, it is believed that the above suggestions are adequate.

The history of raw tongue can be elicited in a majority of cases of pernicious anemia. Yet, too often this simple examination of the most primitive healers is neglected by the busy practitioner. Many attacks of glossitis occur before the classical bald tongue supervenes. Usually the tip or edges of the tongue are first affected in the intense injection of the raw stage, but atrophy may ultimately render the tongue of pernicious anemia entirely devoid of papillae, or bald. No single manifestation of pernicious anemia holds the same diagnostic significance as achlorhydria. Levine and Ladd[7] found achlorhydria in 99 per cent of 105 cases of pernicious anemia. The presence of free hydrochloric acid in the gastric contents of an anemic patient should raise an immediate serious objection to a diagnosis of pernicious anemia. Indeed such a finding would obviate this conclusion in the minds of a majority of students of the subject. Furthermore, the existence of an achlorhydria is usually attended by a complete achylia gastrica. The occasion is not ripe for a discussion of the possible causal relationship between this condition and the hematopoietic and cord changes, to which special attention has been paid by Hurst[8] and Vanderhoof.[9] The antecedence of achlorhydria over the development of the clinical picture of pernicious anemia may amount to as much as fourteen years.[10]

The neurologic symptoms and signs of pernicious anemia may likewise anticipate the appearance of the blood changes. A period of four years elapsed in the instance of one patient suffering from subacute combined degeneration of the cord under our observation before the blood began to show suggestive changes. The coexistence of evidences of combined posterior and lateral tract degeneration and achlorhydria will conclude the diagnosis of pre-anemic pernicious anemia of the cord, therefore, at variable intervals before the development of a suspicious blood picture in many cases. Importantly there is no parallelism between the degree of anemia and the extent of cord degeneration. To return to the manifestations of these cord changes one may best express the situation by stating that the symptoms and signs depend upon the tract or tracts involved. Omitting a detailed discussion of the paraesthesias which may or may not depend upon cord involvement, posterior column degeneration may result in an almost complete picture of tabes dorsalis, including lightning pains, girdle sensation, loss of position and vibratory sense, ataxia, loss of sphincteric control and of libido and loss of deep tendon reflexes. The mental changes may even suggest the deterioration of taboparesis; but one sign, namely the Argyll-Robertson pupil, has been conspicuously lacking in all cases of subacute combined degeneration of the cord observed in the Wiscon-

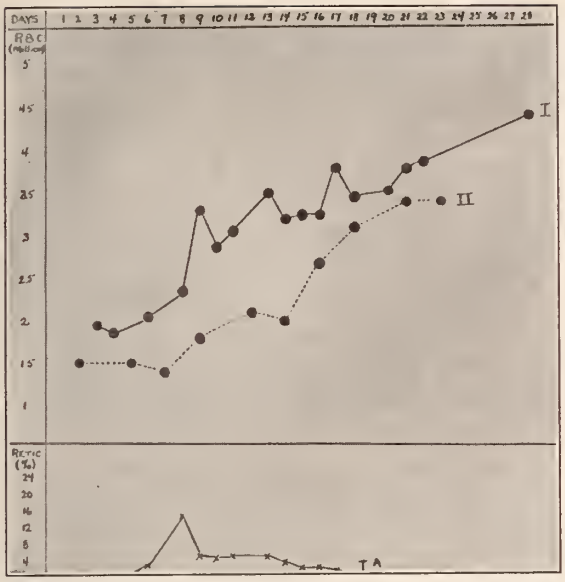

FIGURE 1: Curve I indicates the erythrocyte response to liver extract E-29 (Valentine) in case I; Curve II contrasts the erythrocyte response to the Minot–Murphy diet on an earlier admission. Curve I-A represents the reticulocyte response to E-29. Days refer in all instances to the duration of liver therapy.

sin General Hospital. One of the earliest signs of this cord change is the loss of vibratory sense which should be carefully sought in all cases of anemia. Lateral column degeneration leads ultimately to spastic paralyses, hyperreflexia, cloni, Babinski and confirmatory reactions. From the involvement of the posterior and the lateral columns may be anticipated a combination of the above manifestations. One circumstance must be borne in mind in reconciling certain apparent incongruities; to wit, if the lateral column involvement antedates that of the posterior column, one may expect a persistence of hyperreflexia and its concomitants even in the presence of unmistakable evidence of posterior column degeneration.

LIVER THERAPY

With this brief summary of the clinical aspects of pernicious anemia in mind, it becomes apparent that an evaluation of the effect of liver therapy must take into account every angle of the problem. It is a commentary on the accuracy and the comprehensive scope of the pioneer work of Minot and Murphy[11] that few important additions to or subtractions from their earliest contributions have been registered. As in every medical advance extravagant claims have been extended by the less critical; and one feels that such statements, as "the anti-pernicious anemia body has been found,"[12] demand serious reservations. Briefly stated, Minot and his co-workers concluded that in response to adequate doses of liver there resulted prompt remissions in the course of pernicious anemia. These remissions were preceded by remarkable showers of reticulocytes whose numbers were inversely proportional to the level of the erythrocytes at the time of initiation of the liver therapy. If the initial level was more than three million erythrocytes per cubic millimeter, no such characteristic response was noted. Peabody's bone marrow studies[13] on the pernicious anemia subject in vivo determined the coincidence of the appearance of reticulocytes in great numbers in the peripheral blood with the disappearance of the megaloblasts from the marrow and its reversion to the normal type under liver therapy. The return of physical and mental vigor advanced apace with the steady climb of erythrocytes which inevitably succeeded the reticulocyte shower on the exhibition of adequate amounts of liver. Minot and Murphy[2] found no return of free hydrochloric acid to the gastric contents, although the glossitis and the gastro-intestinal symptoms responded satisfactorily to the treatment, apparently independently of the use of diluted hydrochloric acid. Nor did the major manifestations of central nervous involvement satisfactorily abate under this form of treatment.

An extract was then evolved from liver by the Harvard group[14 15] and its potency proved even greater than that of the whole liver of the Minot–Murphy regimen. A tremendous literature has developed on the subject and an overwhelming vote of confidence given the use of liver or an effective fraction in pernicious anemia. Certain reports[16 17] have even indicated a return of function to the seriously damage central nervous system. On the other hand an extreme viewpoint has been expressed by Fried[18] as follows: "The serious character of the lesion of the spinal cord in pernicious anemia and the peculiari-

ties of tissue repair in the central nervous system render impossible a cure in the spinal cord symptoms under the influence of the liver diet. In view of the nature of the lesion, likewise, one may not expect great improvement in the nervous symptoms even though the anemia has disappeared, and it is remarkable that any functional improvement at all should occur."

In 1928 the results of the liver therapy (Minot–Murphy regimen and extract supplied by Eli Lilly and Company through the courtesy of the Committee on Pernicious Anemia of the Medical School of Harvard University) in thirty-two cases of pernicious anemia at the Wisconsin General Hospital were reported.[19] On the Minot–Murphy diet twenty consecutive cases of pernicious anemia, co-operating fully, showed uniformly prompt and satisfactory remissions in the blood condition. Two of these patients had serious relapses on discontinuance of the diet. Two additional patients, who had received many transfusions prior to the use of liver and who showed signs of advanced cord changes, responded very slowly to the liver therapy and eventually died outside of the hospital. An added group of ten patients with pernicious anemia received various liver extracts as furnished by the Harvard Committee. Nine of the ten in this group responded promptly to the extracts and the tenth, suffering from advanced cord changes and having received many transfusions, experienced a slow remission without a characteristic reticulocyte shower.

Further substantiation of the effectiveness of liver extract 343 (Eli Lilly) has been met in ten additional cases of pernicious anemia of the past year, wherein remissions were induced, as previously reported, promptly and regularly through its use. Three ineffective fractions from other sources have been studied. Through the courtesy of Dr. William B. Porter of Richmond, Virginia, a liver extract (E-29 or F-29) has been supplied by the Valentine Meat Juice Company. The Richmond group[20] reported results in forty-five cases of pernicious anemia comparable to those obtained with other forms of liver therapy. In fact more prompt and more rapid responses have been obtained with this extract than with whole liver. Several interesting observations developed from their more frequent reticulocyte counts. A rapid fluctuation of the reticulocytes, amounting to as much as 18 per cent difference in 24 hours and frequently from 6 to 11 per cent in four hours, was established on exhibition of the potent liver extract E-29. More important than this was the determination of a second distinct peak of reticulocytes after the primary response. A similar but less decisive observation (in its failure to represent as frequent reticulocyte counts) is that of Sturgis, Isaacs and Smith:[21] "After the reticulocyte percentage reaches its maximum and begins to decrease, there is often a second but less marked rise in the percentage before the final diminution starts." This secondary rise is not uncommon (curve III-A of figure 2) and its explanation is still conjectural.

Liver extract E-29 has been given to seventeen patients suffering from pernicious anemia in the Wisconsin General Hospital. The results have been quite in accord with those reported by the Richmond group.[20] No case failed of an appreciable response. Singularly nine of the seventeen cases showed definite evidence of cord involvement; but some improvement in the blood was noted in each case and satisfactory remissions were induced in all except three instances. The first of these is discussed in detail as case 8. In the other two, the erythrocytes rose 600,000 or 700,000 in two weeks of E-29 exhibition (3.2 to 3.8 millions and 2.9 to 3.6 millions, respectively). A distaste for the extract arose and the Minot–Murphy diet was substituted. No further rise of erythrocytes appeared in either case. In one, the subsequent use of liver extract 343 (Eli Lilly) was well tolerated and within two months a normal level of erythrocytes (5 millions) was reached, while in the second no further elevation of the erythrocytes was effected by the substitution of 343 (Eli Lilly). Including five of the instances of central nervous involvement above discussed (three being cases in which E-29 was discontinued), eight of the group had had previous liver therapy and three of these were readmissions to the Wisconsin General Hospital. An average

increase of 1.46 million erythrocytes was noted in 19.7 days for the group as a whole. These figures are more remarkable since they include three cases having an initial level of over 3 million erythrocytes. Furthermore, the inclusion of so many cases with subacute combined degeneration would adversely affect the speed and ultimate height of the erythrocyte climb. Nevertheless a more satisfactory level of erythrocytes was invariably induced by the use of E-29. Typical curves of the erythrocyte and reticulocyte response are plotted in figures 1, 2 and 3.

Case I may be considered characteristic:

E. K.—An adult white male, 62 years of age, carpenter by trade, was re-admitted to the Wisconsin General Hospital on April 27, 1929, in the third relapse of a classic pernicious anemia. Importantly in addition to the subjective symptom of paraesthesia and the obtunded vibratory perception over the tibiae of the previous periods of study (eight and nineteen months, respectively), there had developed ataxia and marked decrease in the deep tendon reflexes of the lower extremities, and dysmetria in the uppers.

A characteristic blood response attended the exhibition of E-29 as witness curves I and I-A in figure I. For contrast, curve II of the response to the Minot–Murphy regimen on the first admission is appended.

In this case the reticulocytes reached a moderate peak of 14.9 per cent on the eighth day of E-29 and within three weeks the erythrocytes had climbed from 2,010,000 to 3,950,000. At the end of the four weeks they had reached 4,420,000 and the blood remission was in every way established. The response of the earlier admission to the whole liver of the Minot–Murphy regimen was less prompt; but there is a certain similarity in the forms of these curves to which attention will be drawn later.

NEW PROBLEMS

Every new form of therapy evokes new problems or revives old ones. The lessons of insulin, to mention but a single example, are too recent to require expansion. To this rule liver therapy has been no exception.

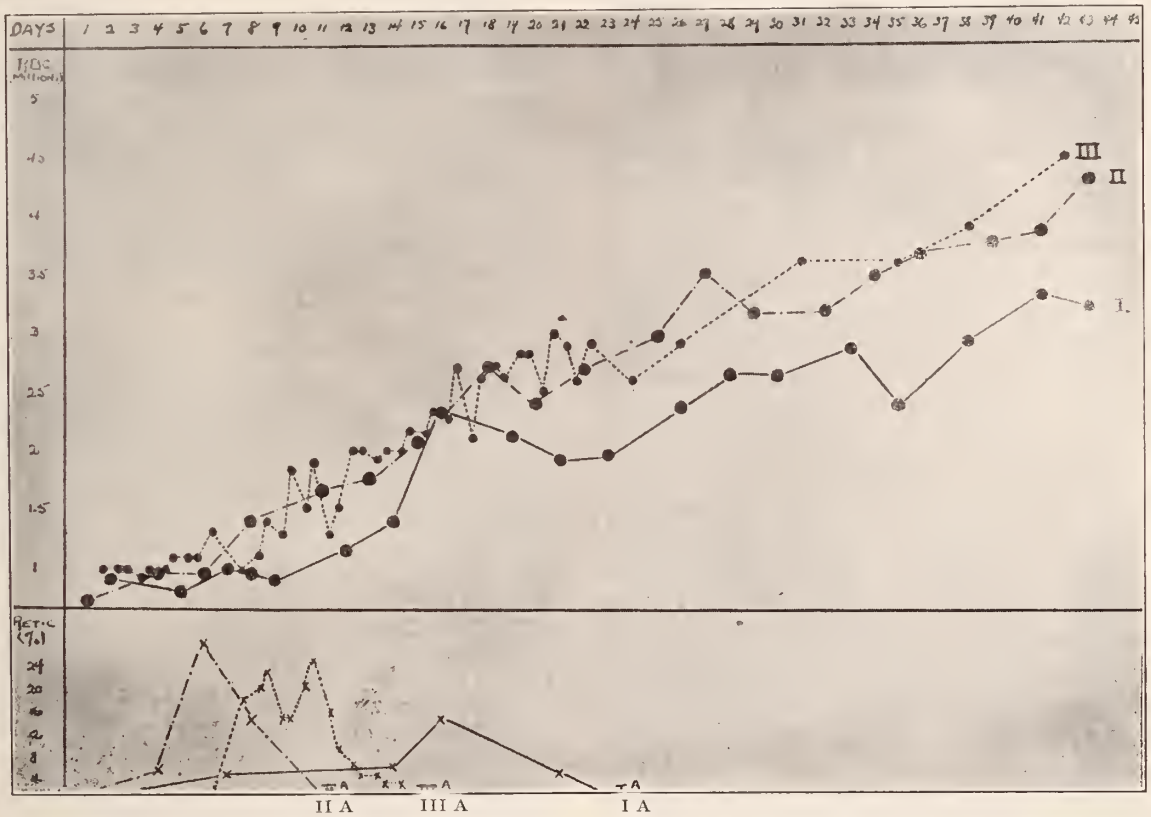

FIGURE 2: Curves I and I-A represent the erythrocyte and reticulocyte responses, respectively, to the Minot-Murphy diet in case 5; Curves II and 11-A the same for liver extract 343 (Lilly); Curves III and III-A, the same for liver extract E-29 (Valentine).

Some of these problems are better discussed in illustrative cases:

Case 2: B. G.—An adult white female, aged 39 years, was seen in consultation, on April 3, 1929 complaining of too easy fatigue. Careful study three years previously had led to a diagnosis of pernicious anemia; whereupon a transfusion was given and the patient experienced considerable improvement. This advantage was maintained without specific treatment until November 1927, at which time the hemoglobin was 77 per cent and the erythrocytes 4,020,000. By reason of her history and the continued achlorhydria, one-half pound of liver was prescribed daily and two drachms of diluted hydrochloric acid three times a day. Later a potent liver extract was substituted for whole liver.

Careful inquiry elicited a peculiar cycle of easy fatigability, which reached its maximum early in the spring when every effort, physical or mental, became a burden. Of an intense athletic type her outdoor pursuits included eighteen holes of golf daily during the summer and apparently this exertion was well withstood. As the patient expressed it, "A reserve was built up". With the physical inactivity of winter came mental and physical depression and rest accentuated rather than relieved the same. The single specific symptom reported was an occasional rawness of the tongue.

The physical examination developed no significant findings bearing on the present question. The blood studies determined the hemoglobin at 77 per cent and the erythrocytes 4,490,000.

The natural question arose, "Did this patient ever suffer from pernicious anemia?" She sought an answer and unfortunately the same was not forthcoming without the rather serious risk of withdrawal of the liver therapy. It is only by the observation of the reaction of the general health and the blood picture to removal of this problematic support that one could conclude whether or not she is a true case of pernicious anemia. Here again one is confronted with the indefinite duration of remissions, natural or induced; and unless a relapse occurred on withdrawal of liver, a period of months, or even years, would have to elapse before the final answer could be given. Several circumstances led to a gross suspicion of the existence of pernicious anemia in this case, namely, glossitis, easy fatigability and achlorhydria; but in the last analysis the patient must be a complete partner to any procedure, undertaken to satisfy a serious doubt, which entails the withdrawal of liver therapy. These cases have multiplied in a short period of time, and the indiscriminate use of liver in all types of anemia will lead to a still more rapid increase in the future.

INADEQUATE DOSAGE

A very interesting group of patients is represented by case 3.

M. P.—An adult white male, aged 54, janitor by occupation, was admitted to the Wisconsin General Hospital on March 12, 1929, complaining of weakness. A state of weakness with weight loss had led to his consulting a physician two years previously, as which time "anemia" was diagnosed and a regimen of iron by mouth and by subcutaneous injections and dietary control, including liver, instituted. Additional complaints included vertigo, tinnitus, dyspnoea, anorexia, faintness, nervousness, and sexual impotence.

The physical examination afforded scant positive evidence for a diagnosis in the following findings: cautious gait, evident asthenia, a yellowish cast to skin, thickening of accessible vessels, palpable thyroid gland, soft untransmitted apical systolic murmur, liver edge just palpable, prostate gland enlarged, obtunded vibratory sense in the right leg.

Bearing on the question of the underlying condition the following laboratory data are pertinent:

Hemoglobin	50%
Erythrocytes	2,560,000
Leucocytes	3,650

An icterus index of 15 was established and the van den Bergh was read at 3 units. No urobilinogen was found in the urine. Hemolysis began at 0.45 per cent and was complete at 0.3 per cent sodium chloride. The Wassermann reaction on the blood was negative. The stools showed no ova nor parasites. No free hydrochloric acid was found in the gastric contents and the total acidity was read at 7 degrees. Gastro-intestinal x-rays showed no anatomic lesion.

Further inquiry as to the amount of liver ingested revealed that a maximum of a quarter of a pound had been taken three times a week for an indefinite but short period (possibly three months) at the beginning of medical supervision two years before. Thereafter and up to the time of admission not more than a quarter of a pound of liver had been taken in a week's time. The patient gave as his excuse for failure to follow his physician's advice, a "tiring" of the liver diet.

The administration of copper and iron apparently led to diarrhea without an improvement in the blood picture. Hence it was discontinued after ten days. Appropriate dosage of liver extracts (E-29 and 343) induced a reticulocyte shower of 15.7 per cent on the sixth day and by the twenty-third day the hemoglobin registered 78 per cent and the erythrocytes 4,410,000. The improvement in the general condition was remarkable; but the perception of vibration over the right tibia remained uncertain.

The very desultory exhibition of liver in this case explains his inadequate response. The reticulocyte rise of 15.7 per cent is very good considering the initial level of erythrocytes, 2,560,000 and the increase of almost 2 million erythrocytes in 23 days of liver extracts E-29 (Valentine) and 343 (Eli Lilly) most creditable. Inadequate dosage of liver has been a recognized cause for failure from the outset of this form of therapy.

The responsibility for inadequate liver dosage is not always with the patient as witnesses case 4:

A. L.—A white female, aged 55, housewife, was readmitted to the Wisconsin General Hospital September 17, 1928 complaining of increasing fatigability. A definite victim of pernicious anemia, her response to liver extract (343) had been most satisfactory. Endeavors to stabilize her dosage had apparently resulted in striking a plateau of about 4 to 4.5 million erythrocytes on two vials of the extract a day. This level was maintained from June 21, 1927 until May 25, 1928. Contact was lost during the summer of 1928 but on the next observation of August 6, 1928 there was noted a sharp decline in the general condition and in the blood count. This slump continued up to the time of readmission when the erythrocytes numbered 1,880,000 and the hemoglobin reading 38 per cent. The raw tongue had begun to disturb the patient. Numbness and tingling were present in the hands. A complete study failed to reveal any undetermined source of blood loss or destruction. Liver extract 343 (one vial three times a day) supplemented by bed rest, adequate diet and dilute hydrochloric acid induced prompt remission. The patient was discharged on the tenth day with a hemoglobin of 58 per cent and 3,050,000 erythrocytes.

In attempts to evaluate the factors operative in inducing the relapse, the prompt response to full doses of liver extract 343 (Eli Lilly) would place the prime responsibility upon the inadequate exhibition of a potent extract. Apparent contributory factors were found in the laborious work of a farmer's wife and in the unusual worry of certain domestic difficulties. Just how much the latter circumstances contributed to the relapse is difficult to state, but that they had some share is evidenced by the apparent adequacy of the liver therapy uncomplicated by overwork and worry. Here again the question of the indefinite duration of natural as well as induced remissions arises.

RECIDIVISTIC TENDENCY

The recidivistic tendency is well marked in patients with pernicious anemia, if the experience at the Wisconsin General Hospital be a fair index. Four individuals have deliberately discontinued their dietary control or their liver extract in the face of vigorous, almost brutal warnings after characteristic remissions had been induced by the therapy. The following case 5 is an example:

A. H.—A white laborer, aged 62, was first admitted to the Wisconsin General Hospital on February 15, 1927 with the classic clinical and laboratory findings of pernicious anemia. No definite evidence of cord involvement could be discerned. Under the Minot–Murphy regimen the accustomed physical response was noted and in curves I and I-A of figure 2 the blood response may be traced. On discharge from the hospital he followed the prescribed dietary regimen for only one week, but experienced no disability until he was incapacitated by progressive weakness in the fall of 1927.

On February 20, 1928 this patient was readmitted in an extremely weakened condition. No apparent success was met in the use of copper and iron. So on the ninth day liver extract 343 (Eli Lilly) was given in two vial doses three times a day. Curves II and II-A, figure 2, portray the response in the blood picture as compared with the previous reaction to the liver feeding of the Minot–Murphy regimen. The improvement in the general condition was no less spectacular.

Still another comparison was forthcoming in another relapse leading to his readmission on January 21, 1929. On this occasion F-29 (Valentine) was administered in one ounce doses three times a day. Curves III and III-A of figure 2 demonstrate the response to this therapy in contrast to whole liver and to a known potent extract 343 (Eli Lilly). The reticulocyte curve (III-A) demonstrates also the interesting occurrence of a double peak as stressed by Porter, Williams, Forbes and Irving.[20]

Case 5 is an interesting example of the escape of the central nervous system in the face of repeated low blood levels and a continued achlorhydria. Further interest attaches to the regularity of response to liver or to potent liver extracts. Contrary to the impression gathered from Minot and Murphy[11] the later relapses, second and third, which have been met in the Wisconsin General Hospital, responded as promptly and as adequately to an effective liver fraction as did the first. Cases 1, 5 and 9 are striking examples of this circumstance. Indeed, so

close is the approximate form (and on the exhibition of potent extracts, the degree) of these curves, figures 1, 2 and 3, that a generalization has seemed warranted; namely, that the dosage of liver which is optimal for the given patient, will elicit approximately the same response regardless of the frequency of relapses. It should be remarked that there is apparently some delay in the reticulocyte peak of subsequent remissions (figures 2 and 3).

NEUROLOGIC INVOLVEMENT

The cases of pernicious anemia showing neurologic involvement constitute a most trying group.

Case 6: J. R. an adult white male, aged 54, was admitted to the Wisconsin General Hospital on February 10, 1929 complaining of paraesthesia (numbness) in the legs. His history reported an illness dating to November 1928, characterized by weakness, vertigo, tingling in the legs and some difficulty in walking. From December 1928 one-half pound of liver has been eaten daily with prompt recovery of strength and a sense of physical well-being.

In spite of a blood level of 4,295,000 erythrocytes and 60 per cent hemoglobin with normal bile pigment in the serum, the evidences of postero-lateral degeneration were obvious in the following signs: ataxic gait, positive Romberg sign, ataxia in test movements of the legs, exaggerated deep tendon reflexes in the lower extremities with ankle clonus, loss of vibratory sense.

The incidence of a virtually normal blood picture in victims of combined degeneration of the cord is not unusual, and evidence is accumulating for the inability of liver therapy to meet this most serious angle of the problem.

A second case is presented to stress the progression of neurologic manifestations in spite of adequate liver therapy.

Case 7: P. H.—an adult white male, 41 years of age, farmer, was admitted to the Wisconsin General Hospital on August 2, 1928 complaining of inability to use his legs. The history evolved a rather sudden onset of symptoms of weakness and easy fatigue succeeding "intestinal flu" in August 1926. Diarrhea with occasional bloody stools continued after the acute attack had abated, until the spring of 1926. Progressive weakness led to hospitalization in January 1926. In the interval to June 20, 1926 when he was discharged from the hospital, eight transfusions were performed. There was a decided improvement in the general condition, but for some reason the patient felt that he had not recovered sufficiently to resume his work. About this time loss of rectal and vesical sphincter control was first apparent. The inventory by systems elicited the occurrence of frequent epistaxis through the winter of 1927–28, recent nausea and vomiting and numbness in the legs and feet. For the past two years or more the patient has eaten 2 to 3 pounds of calves' liver a week.

The physical examination was significant only in the neurologic findings: spastic contractures of both legs, less marked rigidity in upper extremities, voluntary movement practically impossible in the legs, gross increase of all deep tendon reflexes, cloni in biceps, patellar and Achilles tests, Babinski bilaterally positive (as were also confirmatories), loss of vibratory sense in the legs and trophic ulcers on buttocks, scrotum and penis.

In spite of the relatively high blood count, 3,650,000 erythrocytes with 70 per cent hemoglobin, the icterus index reached 25 and the quantitative van den Bergh 5 units. Urobilinogen was likewise present in the urine. The gastric contents showed no free hydrochloric acid. The Wassermann reaction was negative on the blood and the spinal fluid.

The patient ran a septic course from a urinary tract infection secondary to a cord bladder and succumbed to acute uremia on the fourteenth day.

Somewhat similar in type but representing a different angle of the same problem is case 8:

J. D.—An adult white male, aged 54, carpenter by occupation, was admitted to the Wisconsin General Hospital March 22, 1929 complaining of soreness in the abdomen. The history developed the existence of paraesthesias in the feet over a period of two years with recent numbness in the finger tips. A difficulty in walking and in maintaining his balance has grown apace. Weakness has been a troublesome manifestation and weight loss (27 pounds in a year) has been remarked. The incidence of rheumatic fever at fourteen years of age and malaria at forty-two alone may be deemed significant in the past medical history.

The physical examination established the following pertinent findings: marginal atrophy of the papillae of tongue, palpable liver edge, slight enlargement of the prostate, ataxic gait with complete abasia when unsupported, markedly positive Romberg sign, ataxia in test movements of lower extremities, loss of position and vibratory senses in the legs, absent cremasteric reflexes, reduced to absent patellar and Achilles reflexes.

A diagnosis of postero-lateral degeneration of the cord from pernicious anemia was made and the determination of an achlorhydria in the absence of any demonstrable gastric lesion supported this conclusion. A hemoglobin reading of 75 per cent with 3,005,000 erythrocytes and 5,400 leucocytes was reported. The icterus index of 6 and the quantitative van den Bergh of 1.0 unit were interpreted to repre-

sent a rather quiescent phase of the disease. No urobilinogen was found in the urine and the stools were repeatedly negative for intestinal parasites.

Close questioning of the patient together with the referring physician's statement established a conscientious adherence to the prescription of a recognized potent liver extract in generally accepted adequate dosage for upward of a year. E-29 was exhibited in doses of one ounce three times a day for a period of 19 days with moderate improvement in the blood picture in that at the conclusion of this period the erythrocytes numbered 3,630,000 but the hemoglobin had slumped to 63 per cent. The neurologic situation was unaffected. Thereupon excessive doses of liver extract 343 (Eli Lilly) two vials three times a day, were substituted for E-29. In the succeeding fifteen days the erythrocytes rose to 4,750,000 and the hemoglobin to 76 per cent. Needless to state, with the initial high levels of erythrocytes there occurred no reticulocyte showers in response to either extract. There was no amelioration in the neurologic symptoms and signs with the improvement in the blood picture.

This circumstance is unusual, but concurs entirely with Minot and Murphy's early contention of a slower or impaired response to liver therapy in the presence of combined degeneration of the cord.

A backslider, case 9, represents still a further refinement of the same problem:

A. G.—An adult white male, 56 years of age, farmer by occupation, was first admitted to the Wisconsin General Hospital on August 7, 1928 complaining of gastric discomfort. Clinical studies concluded a diagnosis of pernicious anemia which was supported by the grave anemia (840,000 to 1,190,000) with macrocytosis, high icterus index (15) and achlorhydria. Furthermore the neurologic examination revealed ataxia in gait and test movements of the lower extremities, a positive Romberg sign and loss of vibratory sense over the tibiae. Significantly although the blood Wassermann was negative, the cerebrospinal fluid showed a 3 plus reaction; the gold sol was read 0122210000 and globulin was present in small amounts.

On the sixth day after admission E-29 (Valentine) was exhibited in two-ounce doses three times a day. Diluted hydrochloric acid was given in doses of 6 cc. three times a day. The level of hemoglobin was 14 per cent on this day and the erythrocytes numbered 960,000. The reticulocyte peak was reached four days later at 25.9 per cent and the erythrocytes steadily rose to reach a level of 4,500,000 on the twenty-ninth day (figure 3), when the Minot–Murphy regimen supplanted the liver extract (E-29) to prepare the patient for discharge. Spinal fluid studies at this time revealed a negative Wassermann reaction; but the gold sol registered 0112221000 and globulin was still present. The general improvement was excellent; but the neurologic signs persisted. Renewed vigor masked the ataxia.

After an interval of about ten months the patient was readmitted to the hospital with a confession of failure to adhere to the prescribed regimen. He had maintained relatively satisfactory health for four months (February 1929). Then his strength seemed to fail him and he became short of breath on the slightest exertion. Gastric discomfort recurred. The clinical picture of pernicious anemia was again clear cut and the neurologic signs remained as on discharge. The hemoglobin had fallen to 35 per cent and the erythrocytes to 1,650,000. The icterus index was 10 and the quantitative van den Bergh 3 units.

Liver extract (E-29) was again exhibited but in doses of one ounce three times a day. The reticulocytes promptly rose to 20.8 per cent on the seventh day and by the twenty-third day the erythrocytes had reached a level of 4,680,000 (figure 3). A corresponding improvement was noted in the physical condition; but, again, aside from those manifestations which might be explained on a basis of improved strength, no evidence of relief of the neurologic signs was remarked.

Case 9 is interesting in refutation of Bloomfield's[22] suggestion of the availability of large doses (up to the equivalent of 4800 grams of liver in 2 days) of potent extracts in inducing more rapid and complete remissions. This case showed as adequate response on his second relapse to one-half the dosage of extract as he did on the first admission. The existence of a positive Wassermann reaction in the spinal fluid demands particular attention. Sanford[23] reported occasional false positive Wassermann reactions in the blood of patients suffering from pernicious anemia. This is the second positive spinal fluid in the non-syphilitic cases of pernicious anemia studied in the Wisconsin General Hospital, and the disappearance of the reaction on the improvement of the blood picture indicates a possible relationship to disturbed lipoid metabolism. Moreover in case 9 no suspicion of a luetic background was entertained, whereas in case 10 this diagnosis is admitted and confuses what would ordinarily be a simple picture of Addisonian anemia.

ANEMIAS OF SYPHILIS

Case 10: P. C.—An adult white male, aged 57, confectioner by occupation, was admitted to the Wisconsin General Hospital in a state of extreme men-

tal confusion with the history of recent active antiluetic treatment. Marked persecutory delusions were noted; but the history obtained from the patient and his attendant was unreliable. By direct questioning the occurrence of sore tongue, weight loss, palpitation, dyspnoea, diarrhea, paraesthesia and dysbasia was elicited. The difficulty in walking had progressed rapidly over the four weeks prior to admission. In the past medical history the incidence of small pox, typhoid fever and yellow fever was noteworthy.

On physical examination the pallor, lemon yellow in tint, was outstanding. The pupils, although unequal and irregular, reacted to light and accommodation. The tongue was slightly atrophic but not bald. A decubitus ulcer was noted on the buttocks. No biceps nor triceps jerks could be elicited on the left. The patellar and Achilles reflexes were absent on both sides. Hypotonia was demonstrable at the knees. The Romberg test was positive. Confusion of tactile discrimination was attributed in part to the mental status, but vibratory sense was unquestionably impaired. Marked ataxia was noted in the test movements of the lower extremities. The gait was very ataxic.

The laboratory results were illuminating in confirming the existence of an anemia (22 per cent hemoglobin, 1,620,000 erythrocytes on admission and 30 per cent with 1,180,000 five days later) and a 4 plus blood Wassermann reaction. The neurologists felt that repeatedly negative Wassermann reactions on the spinal fluid were disconcerting to a diagnosis of tabo-paresis. Nor were the gold sol, Ross–Jones or Noguchi indicative of cerebro-spinal lues. The absence of free hydrochloric acid from the gastric contents and an icterus index of 10 led to the institution of the liver therapy, after routine studies of the gastro-intestinal tract had failed to reveal an independent cause for the anemia.

From a low level of 30 per cent hemoglobin and 1,180,000 erythrocytes on the institution of E-29, the count advanced to 57 per cent hemoglobin and 3,750,000 erythrocytes on the 38th day. The reticulocyte curve showed two peaks of 10 per cent and 13.7 per cent on the fifth and the sixth days, respectively.

The general condition improved beyond that witnessed in any other case under observation. From an almost helpless invalid complaining of gastric distress on the slightest deviation from a liquid diet, he came to be a cheerful patient, helping about the ward, ravenous in appetite and eager to regain control over his extremities. The delusions of persecution could no longer be elicited. The gait remained ataxic; but with regained strength he walked without assistance. The neurologic signs were unaltered and the blood Wassermann was read at 4 plus shortly before his discharge.

The anemias of syphilis have received thorough consideration at the hands of Foucar and Stokes[24] and more recently from Cummer.[25] The unanimous opinion is that the classical picture of pernicious anemia rarely depends upon a luetic etiology. To establish such a connection between the two conditions coexistent in the same patient Hirschfeld [26] has insisted upon the alleviation of the blood picture under specific antiluetic treatment without a remission. Case 10 failed to show a hematopoietic response to the antiluetic treatment which was discontinued temporarily in view of the conflicting blood and cerebro-spinal fluid Wassermann reactions. The mental improvement coincident with the climb in erythrocytes under liver therapy was little short of miraculous; but the Wassermann reaction on the blood remained unaltered. It is only possible to conclude that the response of the blood in this case on the exhibition of liver was characteristic of all anemias with a megaloblastic transition in the bone marrow. Certainly Hirschfeld's criteria were not satisfied.

CONCLUSIONS

1. The value of the liver therapy as introduced by Minot and Murphy is reaffirmed. Its action in encouraging maturation of the erythrocytes in the megaloblastic marrow[27] is not limited to pernicious anemia but extends to all forms with this unusual marrow change, hence its usefulness in the anemias of sprue[28] and dibothryocephalus latus infestation.[29]
2. Liver extracts have proved as potent in this action as has whole liver. The usefulness of one of these, E-29 (Valentine), is discussed. Each additional source of the maturating factor is important in rendering the same more available to the victims of pernicious anemia.
3. The duration of the induced remissions is indeterminate, and a certain reduced dosage of liver or its extract after a satisfactory blood level has been reached, is justified. This reduction will avert the development of a polycythemia. On the other hand, relapses occur after variable periods in cases of pernicious anemia unsupported by adequate liver.

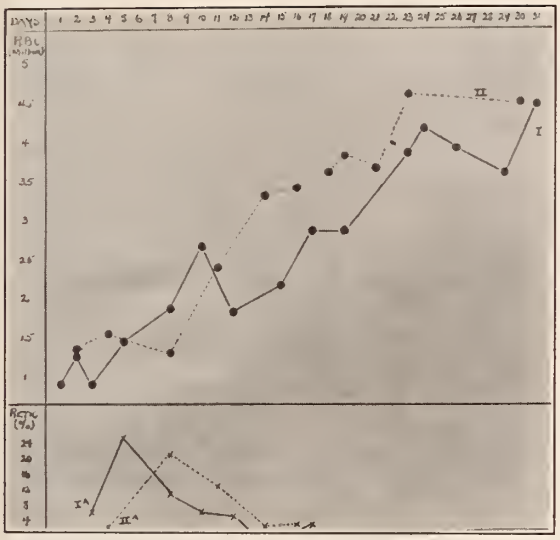

FIGURE 3: Curves I and I-A represent the response of the erythrocytes and of the resticulocytes, respectively, in case 9 to liver extract E-29 (Valentine) in 2 ounce doses three times a day;Curves II and II-A, the same factors under liver extract E-29 (Valentine) in one-half the above dosage.

4. In four relapsing cases an apparent quantitative reaction has been noted to the optimal dosage of liver. The optimal dosage may well vary in different individuals or in the same individual with inhibiting factors, as infections, transfusions and central nervous involvement.
5. Neither whole liver nor the extracts as yet available have, in any way, influenced the achlorhydria or the course of the subacute combined degeneration of the cord.
6. This circumstance gives further weight to the older conception of an interdependence of hematopoietic, digestive and central nervous manifestations on a common etiologic background; and great as is the present advance, it gives the answer only to the pathogenesis of the hematopoietic phase of the pernicious anemia problem.
7. The clinical advance has outdistanced the laboratory and the etiologic agent for pernicious anemia has as yet escaped detection.

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DISCUSSION

DR. T. L. SZLAPKA (Milwaukee): Dr. Middleton has emphasized the important conception that pernicious anemia is not an anemia but a systemic disease. Unless that is borne in mind, no one can properly understand what is known about the disease, and properly understand the progress and limitations of newer forms of treatment.

Dr. Middleton indicates pessimism regarding the results from treatment. I cannot entirely share in this belief. He speaks of the response of the hematopoietic system to this same form of treatment. He feels, I gather, that there is something further to be obtained or discovered which may lead eventually to a restoration or healing of the lesion in the gastro-intestinal and nervous system.

I do not think it is surprising that we get so often so little response, in the central nervous system, to treatment, if we remember the degree of degeneration and damage to the spinal cord that is present in this disease. If we saw cross-sections of the spinal cord and saw the tremendous amount of degeneration and destruction in the spinal cord in advanced cases of neurologic damage in pernicious anemia, I think we would realize that it does not seem probable that recuperation or restoration can occur; and that the process has gone past the stage where much restoration is to be expected.

However, if the neurological lesion has only progressed to the point where mild symptoms and findings are present, I believe that Dr. Middleton will agree that they subside. And I think they subside not entirely because of increase in strength, improvement in the blood picture and generally systemic improvement, but I believe it is because there has occurred improvement or restoration, to some degree at least, of the neurological elements.

I think we must remember that some of the neurological symptoms are not necessarily due to the central nervous involvement, but to a certain amount of peripheral neuritis.

As regards the gastro-intestinal system, particularly the failure of a return of free hydrochloric acid in the gastric content, I think there, too, is a question whether it is possible in a great many cases for free acid to return. If we visualized the condition of the gastric mucosa, I think we would see an advanced degree of atrophy. I do not see how hydrochloric acid could very well return into such a stomach.

I acknowledge that such extremes of gastric atrophy are not always present, but so frequently do they occur that there again I wonder whether expecting a return of free hydrochloric acid into the gastric content may not be expecting a little too much of the poor old stomach.

I was especially interested in the work with the Valentine extract and in the work which appeared just the other day in the Journal of the American Medical Association. It shows that one can look for some activating or regulating substance in various tissues, prepared in various ways, extracted in various manners.

In that connection, I think one should think perhaps of the diet which Conner, at the Mayo Clinic, has been using, in which he depends not only on liver but also to a large degree on what he calls a high vitamin diet, made up of certain vegetables, fruits, brewers' yeast, etc. The trend of thought is more and more that the activating or regulating substances are not to be looked for only in the liver, but quite likely are well distributed elsewhere.

I was interested to hear Dr. Middleton mention the occasional presence of a false positive Wassermann in the blood in pernicious anemia. That occurs every once in a while, often enough to make it worth while to remember that just because a Wassermann is positive in a severe anemia having every

ear-mark of being pernicious anemia, one should not launch immediately into a very extensive anti-syphilitic regime. I have not seen a false positive in the spinal fluid in pernicious anemia, although I have had occasion to have the spinal fluid examined in many cases. But in the blood I have seen a false positive Wassermann quite a few times, which often disappeared as the patient's blood level improved. So one wonders whether a great proportion of the so-called syphilitic pernicious-like anemias are not really true pernicious anemias with false Wassermanns.

I think, too, that some of the pernicious anemias attributed to intestinal parasites are truly pernicious anemias with only accidental intestinal infestation. I have seen some bothriocephalus infestations, but I cannot recall a single case in which I could feel that it really simulated a true pernicious anemia.

Dr. Middleton referred to the possibility of producing a polycythemia with overtreatment with these extracts. I do not know whether he has ever seen a true polycythemia develop. I have seen high blood levels, but never a marked polycythemia, and I would like to have Dr. Middleton give us some more specific information on this point.

Bronchoscopy*

By WELLWOOD M. NESBIT, M. D.,
Madison

Bronchoscopy is the inspection of the trachea and bronchi with an illuminated tube or speculum. However, for convenience this term is usually applied to the other peroral procedure, viz.: laryngoscopy and esophagoscopy.

Bronchoscopy is indicated in the diagnosis and removal of foreign bodies and the diagnosis of disease of the respiratory tract. Originally this procedure was developed for the removal of foreign bodies from the air and food passages. However, during the past few years this field has been greatly increased and is now of distinct value in the diagnosis and treatment of pathological lesions of these tracts.

Peroral endoscopy is a special field in medicine and requires special training and long periods of practice before one is capable of interpreting correctly the findings through the tube. The difficulties are primarily that the endoscopist is using but one eye, which, if not trained, has no sense of depth perception. The small size of the tubes also adds to the difficulties; that is, in a baby it is often necessary to use a tube four (4) millemeters in diameter, which with the forceps filling a large portion of this small area leaves but a limited space through which to visually guide the operative procedure.

These procedures differ from other specular exposures, such as vaginal or rectal, in that they require special technic not only for their successful introduction but to avoid serious and often fatal injury to the patient. For an example, if an esophagoscope is pushed blindly down the pharynx, it may perforate through the pharyngeal wall into the mediastinum with greater ease than to enter the esophagus itself.

ANESTHESIA

Endoscopy can be performed with a local anesthetic, with preliminary doses of morphine. In fact it is absolutely essential to use a local anesthetic in dyspneic patient. A patient, dyspneic from mechanical obstruction of the air way by a foreign body, will usually die when completely anesthetized with any general anesthetic.

However, in patients that are not dyspneic, I prefer a general anesthetic which allows the endoscopist to work with more concentration and smoothness. Recently Dr. Waters of the Wisconsin General Hospital has been administering a rectal anesthesia to all of my endoscopic cases. The drug, a three (3) per cent solution of tribro-methanol, is instilled into the rectum in amounts of one and five tenths (1.5) c. c. per pound of body weight. The induction is rapid and produces an ideal anesthetic for this type of work where the anesthetist often interferes with the operation. The only objection found so far in a rather large series of cases is that the recovery is slow, the patient remaining asleep for about two to five hours.

FOREIGN BODIES

In the past few years it has been recognized that the presence of foreign bodies in

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the air and food passages is not a rare occurrence. This is due to the development of the Roentgen ray diagnosis as well as of endoscopy.

Symptoms of foreign bodies in air passage of course depend on the type of foreign body and its location.

There is usually a definite history of sudden onset, with choking, coughing, and wheezing which may or may not be followed by varying intervals of time without any symptoms.

This onset is often lacking or forgotten.

Symptoms of laryngeal foreign body—when foreign body lodges in the glottis there is usually hoarseness, croupy cough, wheezing, and often marked dyspnea. An obstructive foreign body in the larynx may cause sudden death. The symptoms are often typical of a laryngeal diphtheria and when in such a case, cultures are negative and there is no membrane, a direct laryngoscopy is always indicated.

Symptoms of tracheal foreign body—Jackson describes three symptoms which are pathognomonic of tracheal foreign body.

1. "Audible slap", which is heard at the patient's open mouth. It is a peculiar sound due to the flopping "up and down" of the foreign body in the trachea with the respiratory movements.
2. "Palpatory thud" is due to a similar phenomena except that it can be palpated over the trachea.
3. Asthmatoid wheeze, aptly describes the wheezing sound also heard at the open mouth. Cough, hoarseness, and dyspnea are often present.
4. Dyspnea is usually present in tracheal foreign bodies.

Symptoms of bronchial foreign body—often a sudden onset, with choking, coughing, and gagging as in the above locations. This may be followed by varying interval of time, free from symptoms, followed by recurrence of cough, foul odor to sputum, fever and loss of weight. Metallic or glass foreign bodies that are not obstructive will often give but few symptoms for months. Obstructive foreign bodies will produce atelectasis and early abscess formation, with picture of tuberculosis, club fingers, etc. Dyspnea is usually absent in bronchial foreign bodies.

Vegetable organic bodies such as the peanut kernae, beans, corn, and fruit seeds immediately cause a violent trachea bronchitis due to the irritating oils they contain. The patient then gives the picture of a severe toxemia, with high fever, violent cough, marked dyspnea, and often death within a few hours or days. These children, as Chevelier Jackson says, "literally drown in their own secretions."

Diagnosis of foreign body in tracheobronchial tree is made by the history, with its sudden onset with initial symptoms, the Roentgen ray and physical findings. Roentgen ray is probably the most valuable diagnostic means. The x-ray examination should extend from the nasopharynx to the rectum. It will always show metallic foreign bodies as well as teeth, beads, some buttons, and bones. The presence of non-opaque bodies such as peanut kernae must be diagnosed on the changes in the lung and surrounding structure and require the training and judgmnt of an expert roentgenologist for interpretation.

The physical signs are also essential in localizing non-opaque foreign bodies and I depend entirely upon the skill of the internist and pediatrican for this examination.

Removal of foreign bodies from the air passages, is purely a mechanical problem and its solution must be determined from all available evidence before its removal is attempted. The most important factor in its solution is the study of the x-ray plates, which must be of at least two views—anterior, posterior, and lateral of the chest. From the study of these plates, it is usually possible to determine the type of foreign body and its presentation.

As Chevelier Jackson says "The study of the presentation is as necessary for the bronchoscopist as for the obstetrician". For each presentation a method of extraction must be solved. Often this requires a version or some manipulation to convert an unfavorable into a favorable presentation for grasping with a forceps.

It is also of greatest importance to secure a duplicate of the foreign body and with it placed in a rubber tube one may often work out a method of extraction before inserting the bronchoscope in the patient.

A good example of the importance of the preliminary study is the extraction of a safety pin. A closed safety pin in the bronchus is a simple problem. All that is necessary is to locate any portion of it through the bronchoscope, seize it and remove. An open safety pin lodged point up is a very difficult problem. If seizure is made without closing the pin or protecting the point, it will perforate the bronchial wall, which may be fatal as well as being impossible to remove. However, by careful preliminary study, locate the position of the points by certain manipulation, seize the point itself and safely and quickly extract it. In removal of all pins with point up the problem is not only to locate the pin but find the point itself which must be seized with the forceps. Staples, with their double points upward lodged in the tissue, is another extremely difficult problem which must be solved in each case before an attempt at removal.

Extraction of soft friable foreign bodies such as peanut kernel or corn presents other difficulties. The problem here is to grasp the kernel firmly so that it can be held during removal but not with enough force to crush it and scatter particles of it throughout the bronchi.

It is also essential that there be present space on each side of the foreign body for the jaws of the forceps. If such a space is not present between the foreign body and the bronchial wall, some scheme must be devised to produce a more favorable position for grasping. Vegetable foreign bodies, such as corn, beans and peanut kernels usually become swollen and block the entire lumen of the bronchus and only by using the lip of the scope and the forceps together in manipulating the object can space be obtained for the grasp of the forceps.

BRONCHOSCOPY FOR DISEASE

During the past few years the indications for bronchoscopy in disease of the respiratory tract have greatly increased.

It is of greatest therapeutic value in lung abscess of short duration, such as post-tonsillectomy pulmonary abscess. If these cases are seen within the first few weeks, brilliant results are obtained by a few bronchoscopic treatments. Under local anesthesia the diseased area is located with the bronchoscope and removal of the thick pus is made through the aspiring tube. This procedure is repeated once or twice a week.

In chronic cases of pulmonary abscess bronchoscopy may be of aid in establishing better drainage facilities. Many of these cases are prevented from improving because drainage and ventilation of the involved area is blocked by the presence of granulation tissue. Clearing away granulations and aspiration of the thick tenacious pus by means of the bronchoscope and forceps may reestablish spontaneous drainage.

Early malignancy of the tracheobronchial tube can be diagnosed only through the aid of bronchoscopic examination and removal of tissue. Vinson of the Mayo Clinic has made a diagnosis of primary cancer of the lung in seventy-seven cases, during the past three years.

Removal is difficult because of their location; however, Sauerbruch has reported five cases with two cures. Jackson has reported numerous cases which have apparently been cured by deep x-ray therapy when diagnosis had been made in early stages.

In many clinics, lipodal is injected through the bronchoscope, to map out the tracheobronchial tree in the x-ray plates. We feel that the passive method described by Dr. Oschner and myself is much more simple and accurate. Should the passage of the lipiodal into the bronchi show some evidence of obstruction, which is often due to granulation tissue or a new growth, then further investigation by the bronchoscope is indicated.

In conclusion, the bronchoscopy for disease is another instance where blind methods have been replaced by the more scientific methods of direct inspection.

DISCUSSION

Dr. Lyman A. Copps (Marshfield): Mr. President and members of thes Society: There is so much in connection with the subject of bronchoscopy that one can hardly discuss it without touch-

ing only one or two phases. Dr. Nesbit has covered the subject excellently and has given a good idea of the uses and usefulness of bronchoscopy. The diagnosis of foreign body in tracheobronchial treatment is usually fairly easy when the case comes in with distinct history of having choked upon some object, the choking followed by a very persistent cough, and dyspnea or other respiratory disturbances.

Even then, the case should be given every examination possible to locate the foreign body as well as to determine the general condition of the patient, so as to find anything that may make a bronchoscopy dangerous or hazardous.

Dr. Jackson thinks there is no contraindication of removal of foreign body from the tracheobronchial area. The case that is neglected that has been carrying foreign body in the lung for some time is the one which frequently goes without diagnosis, most probably because the possibility of foreign body is not considered. There is no question but what there are thousands of individuals lying in their graves with foreign bodies in their lungs, with tuberculosis as the diagnosis, and it is a condition for which we should be on the lookout.

A case of chronic, persistent cough, especially if it is associated with blood should be given the benefit of an x-ray with the idea of determining whether there is foreign body present, in case the diagnosis is not perfectly made, and should be given a very careful examination with that idea in mind. In such a case, if foreign body is not found or is not suspected, the diagnosis cannot be made until bronchoscopy is given consideration, because there is no question but what bronchoscopy is a great aid in diagnosis of many obscure cases. As Dr. Nesbit said, it is the only sure way of diagnosis.

We have had a case recently which illustrates that well. Carcinoma was diagnosed through bronchoscopy; the papillary sarcoma was removed, and the patient's life was prolonged a year or more even though we did not expect cure.

My greatest trouble in diagnostic and therapeutic bronchoscopy has been the case of the collapse of the lung, due to a clot of thickened mucus in one of the bronchi, completely obstructing it, which was frequently and still frequently is diagnosed as pneumonia. Partial drainage will take care of a certain percentage of cases, but partial drainage does not take care of it in the short time that bronchoscopy will.

In chronic lung abscess, our experience is very much like Dr. Nesbit's. We feel we can get a good idea of the exact location, and the extent of the abscess, but do not feel we can cure it. In chronic, long standing tubular bronchiectasis, it is the same thing, although in some types of bronchiectasis, we are pleased with our results.

DR. S. G. HIGGINS (Milwaukee): I feel this is a timely presentation of Dr. Nesbit's very excellent paper.

As you know, Professor Heslinger, of Vienna, gave a course in bronchoscopy and laryngology, with a great many excellent preparations in several of the large cities of the country last spring. There will probably be something more heard of along this line and a revival of the original work that has been done in Vienna for many years.

I was very much pleased, when I reviewed the course of bronchoscopy with Professor Heslinger, to see he is using now the same instruments I bought in Vienna. It would appear the Vienna schools are not as well satisfied with these instruments as we all have been with the diverse innovation sets which have not been changed since they were originally introduced.

It does not matter whether you use a distillate, as Jackson does, or a reflex light, as they do in Vienna. It is a matter of training and practice with either method. The work, of course, appeals to us most dramatically from the point of the foreign body, but it has an appeal also from the angle of exact, nice technique and diagnosis. You can know positively something of the malignant growths in the lungs and esophagus, and you have the use, in connection with this, in relation to lung abscess, and also in relation to pus that accumulates in the case of bronchiectasis.

A very pleasing thing is the manner in which the patients accept the use of lipiodol, as introduced through the bronchoscope tube or through the laryngeal syringe after local anesthesia. The patients on which I recently used it had good drainage, resting them on the x-ray table and putting their toes over the end of the table. When anesthesia was administered, merely tipping the table so the head was down, and the patient did not have any great effort in holding himself in place. We drained out about a cup of pus in this simple method. When lipiodol was used, the bronchial tree was easily marked and the lipiodol reached the lung tissue very promptly. The patient reported much progress and came back in two weeks very happy to have another treatment.

As has been mentioned, and it is almost a part of the subject, the shape of the esophagus tubes are practically the same as the tubes used in bronchoscopy. There is a little variation, if you wish it, but the same tubes can be used and a great deal of the same technique; of course, slightly modified.

With esophagoscopy you can easily diagnose malignant growths. At times there have been cases reported of cures with radium in these cases, although the results are not always as satisfactory as the diagnosis.

Another important point which was brought out or introduced by Professor Heslinger was the use of Heslinger's head rest. Did you notice in the moving picture that the assistant held the head? It is very important to have the head extended and held in a certain position, properly flexed, so that the tube can be introduced. With the use of the Heslinger head rest, one can attach this to any square end table or operating table and insert it

himself in any community, and do the work without having to bring his trained assistant with him or depend upon an assistant more or less confused or excited under this sort of operation.

Professor Heslinger prefers local anesthesia, and has experimented with novocaine and other forms, but for the lung, after the upper part of the pharynx is anesthetized with three per cent cocaine he uses the mixture of twenty per cent cocaine with an equal part of one of three one thousand (3/1000) adrenalin. With three per cent cocaine solution applied carefully in the larynx, complete anesthesia is obtained. I say that because the patient does not object in the least to the introduction of the tube, when you have taken the small amount of time and patience necessary to properly apply the anesthesia.

The patient, of course, in the early introduction of the anesthesia, coughs and spits it out, but he does that so promptly that there is no danger.

I want to ask you to read Dr. Nesbit's paper again, because I am sure it is well worth doing that.

I had a patient who had a porcelain tooth, with a portion of metal plate, in his lung for three years. He had two attacks of pneumonia, and when I saw him he had a lung abscess. This was removed under local anesthesia. The man was relieved as soon as that came out. He felt better, breathed better, and the next day began to enjoy life. He began to have a good appetite and gained twenty pounds in two weeks.

Adults may survive a long time with foreign body in the lung. Children do not do so. The earlier your patients are seen, of course, the better. (Applause)

Modern Methods of Diagnosis in Gastro-Intestinal Disorders*

By R. C. BLANKINSHIP, M. D.,
Associate Prof. Clinical Medicine, University of Wisconsin, Madison

In our present day methods of diagnosis I wish to call your attention at the outset to several pertinent facts: (1) The practice of medicine is both an art and a science, and progress cannot be made except through adequate consideration of both. (2) Medicine is not now and never will be purely an exact science. (3) The prevailing practice is to emphasize science and minimize art, so much so that the latter has almost reached the vanishing point. Even the science as practised is too often not science but slipshod routine. For example, think of the number of x-ray films that are truly spoiled through errors in technique but upon which a clinical opinion is given. A terse sentence often found in the literature on any scientific medical subject reads like this: "Errors in diagnosis are usually due to (1) incomplete examination or (2) improper interpretation of findings. This is true, of course, and applies as I shall later illustrate in the diagnosis of functional or organic disease of the gastro-intestinal tract as well as in any other system of the body. My purpose in discussing this subject is chiefly to indicate the value of the many different methods of precision now in vogue. The complete history and the thorough physical examination are always necessary and their importance should in no way be underestimated. There is, however, a great popular tendency in private practice as well as in diagnostic clinics to skim hastily over both and to seek a quick and definite diagnosis through the use of one or more direct objective tests. Such practice is the most common and inexcusable fault in the use of our modern diagnostic armamentarium and is clearly a sign of decadence rather than progress. The x-ray is merely an aid to diagnosis, and in most cases not even this unless the examination is made by an expert. Under no other circumstances should an opinion given by a roentgenologist serve as a basis for treatment. X-ray is rarely used too much, often however, too unintelligently.

THE GASTRO-INTESTINAL SERIES

The gastro-intestinal series is indispensable in the thorough study of any subacute or chronic digestive disturbance. Aside from gross lesions—ulcers, strictures, diverticuli, etc.,—in the esophagus, stomach and duodenum, the size, position and contour of the various organs as well as the motor activity, cannot be determined so accurately in any other way. The fluoroscopic is the most important part of the examination and it is frequently desirable for this to be done in both the upright and the recumbent position. The location of the barium meal at

* Presented before Eleventh Councilor District Meeting, Solon Springs, Wis., August, 1929.

the end of six, twenty-four, forty-eight, and seventy-two hours is of relative importance only and tells us chiefly what is obvious, namely, the time it takes *barium* to pass through the gastro-intestinal tract and its position at various hours. Too much should never be read into statis plates on the colon because through mixture with bowel contents, gross distortions, which are apparent rather than real, may often be observed.

THE BARIUM ENEMA

To study the lower bowel through x-ray, one should always give a barium enema, as I have previously described.(1) This when properly done will definitely reveal the size, position, and contour of the colon and will also show any filling defects which may be present as well as any major or minor change in haustral markings. . These changes may mean a great deal when the interpretation is tempered with clinical experience and judgment. Localized areas of dilatation or redundancy are often observed, and such anomalies may materially influence the later management of the case. While the diagnosis of appendicitis normally is not to be made through the use of x-ray, if during the course of stasis studies or following a barium enema the appendix is actually visualized under the screen and can be demonstrated to be abnormal in size, position, or mobility, or if definite localized tenderness can be elicited, then the x-ray is of some value —otherwise it is not.

GASTRIC ANALYSIS

The gastric analysis is of diagnostic value chiefly to eliminate the question of achlorhydria, which is always important in any type of chronic digestive disorder, even though symptoms may not be directly referable to the stomach. To plot a curve illustrating the course up or down of free acid during the normal digestive phase, is not only a waste of time, but it is bad practice since it furnishes neither the physician nor the patient with any information of importance. At times it may be of clinical value to determine the secretory activity of the stomach in terms of volume. This can conveniently be done by the method of Bloomfield and Keefer(2) or more simply by aspirating the gastric contents at a time when the stomach normally should be empty. The determination of free acid is not as simple as it might at first seem, owing to an apparent inaccuracy in the reagent (Topfer's) usually used. To prove the presence of free acid this reagent should give a vivid rose color when applied to the *filtered* gastric contents. It is possible upon immediate examination to get a positive test which will be negative after filtration. This is as yet unexplained but is now being investigated. If after an Ewald meal this positive test is not obtained, the patient should be re-examined after histamine as recommended by Matheson and Ammon,(3) Dobson(4) and others. No case should be classified as achlorhydria on the basis of a negative test after a fifty-minute Ewald meal nor even after a fractional gastric analysis, as is often done.(5) Such practice gums up the literature and vitiates observations based upon more accurate studies. The histamine test is simple, safe, accurate and dependable. If a patient shows no free acid after this test, the chances are that he will never again show a positive, and moreover keeping such a case under observation (for the possible later development of pernicious anaemia) over a period of years, is of great importance. The presence of lactic acid and occult blood in the aspirated gastric contents usually means nothing.

X-ray studies of the gall bladder, are, to my mind, still in the developmental stage, particularly in relation to cholecystographic, findings. In all cases of suspected gall bladder disease, it is wise to take a flat plate of the upper right quadrant without dye as a preliminary routine. The dye test, as you all know, has been extremely popular, but I am convinced that through uncontrolled if not uncontrollable variables, this test may not only fail to be of assistance but it may lead to erroneous conclusions and unwarranted surgery. Even Cole(6) admits that we have not yet found the right drug—certainly not in tetraiodophthalein. In the first place to have this dye given routinely through the vein by the average interne staff is not a justifiable practice. Venous thrombosis and unavoidable systemic reactions are entirely

too common except in the most skillful hands, and, as a rule, hospitals and diagnostic clinics do not have facilities in operation to obtain the required perfection in technique. Furthermore, even with unusual excellence in the technical administration of the dye the end result and final reading in so many cases leaves the clinician just where he was before, or worse—may lead the surgeon too hastily into the abdomen. Two weeks after Graham and Cole(7) first completed their preliminary studies, I started to use the dye test. After using all of the different dyes which they have recommended, both by mouth and intravenously, I have entirely abandoned the intravenous route except in the unusual case. Plain capsule without any keratin coating or else an emulsion or a solution of the dye has proven most satisfactory for routine use. If, by this method, definite deformity is seen or if stones are demonstrated, then it is worth while. The gall bladder may fail to fill, however, without any disease of the organ. It may fail to contract normally, whatever this means, and still be a harmless gall bladder. I should especially like to stress one point in relation to cholecystography, namely—the result of the test in itself should never be the deciding factor for or against surgery. If this is conceded to be a just observation, then I should like to see the test immediately take a secondary position where it naturally belongs in the diagnosis of gall bladder disease.

THE PROCTOSCOPE

The modern proctoscope is an instrument which is very easy to use and which merits more universal application. It is often a valuable aid and is at times the only possible method by which an accurate diagnosis can be made. In the differential diagnosis of colitis, visualization of the mucous membrane of the rectosigmoid plus the microscopic examination of a smear taken directly from the mucosa for pus, gives conclusive evidence. There could certainly be no more simple nor direct method of determining the presence or absence of an inflammatory condition of the colon. If, during the course of the sigmoidoscopic examination, a growth is found, a biopsy can be immediately taken. Also, if ulcers are found, smears may be taken for the direct examination for amoeba —and this should always be done in the presence of acute symptoms referable to the colon. In chronic cases where amoebiosis is suspected, a warm stage examination is not necessary, but the collected stool should be examined by some one familiar with the behavior of encysted forms of amoeba for amoebic cysts. It is not unusual to find in the type of case which is popularly called spastic colitis, on adequate examination, either the harmless amoeba coli or the amoeba histolytica. The latter is never a harmless organism and differentiation is naturally very important.

It is furthermore highly desirable in the study of any bowel case for the physician to see the gross specimens of the stool. I have found this extremely valuable and make it a routine practice in all cases of diarrhea. In this manner one can immediately see not only the consistency of the stool, but the presence or absence of undigested food, excess mucous, changed blood, etc. The routine microscopic examination should include a diligent search for ova, parasites and amoebic cysts. More than one examination is necessary and it is oftentimes desirable to go further and determine: (1) The presence or absence of free fat droplets or starch granules, (2) the character of the flora as determined through culture, and (3) the findings on microscopic examination of material collected directly from the mucous membrane through the proctoscope (immediate examination for motile forms of amoeba, later examination of a smear for pus; biopsy). Gross blood in the stool is of great importance and its source should always be determined. Occult blood might come from so many different sources that its presence is of little or no value. This is certainly true unless all of the common sources for blood have been eliminated. By this, I mean not only the food ingested but also the gums, the post-nares, and lesions in or about the anus.

Now that I have briefly scanned the more common direct approaches to diagnosis, an important point which I wish to bring out can probably be done best through illustrations.

Miss E. F., age 26 years, gives a history of diar-

rhoea starting acutely during a tour of Italy last fall. Shortly after this while in northern France the diarrhea stopped but returned again and continued up to the time of examination in May of this year. There had been some colicky pain, never of severe character and never of long duration, nor was it ever localized. Stools numbered three to five daily with a rare formed stool, most of them being of mushy or liquid in character. Naturally parasites were given first consideration and examination was made both for the encysted forms of amoeba and for the motile organisms over a warm stage. Both were negative. The stools were also negative for typhoid and paratyphoid organisms and for bacillary dysentery. A smear taken through the proctoscope, at which time the mucous membrane was demonstrated normal, showed no pus. The next step was the barium enema which was also negative. Gastric analysis showed no free acid after Ewald meal but an abundance of free acid after histamine. The gastro-intestinal series from above revealed no abnormality in the stomach other than hypermotility, and it was noted that at the end of six hours the barium meal had reached the rectosigmoid. A working diagnosis of vagotonia with colon spasm (not spastic colitis because there was no inflammation) was made and the patient was given bromides, a smooth diet, and was discharged. The original loss in weight of fifteen pounds continued and while the number of formed stools increased, the diarrhea still persisted. A dental x-ray showed a huge abscess over one of the bicuspids, so large that it also involved the cuspid. These teeth were removed with no apparent change in symptoms—at least not for the first few weeks. Further study of this patient gave added weight to the accuracy of the original impression. She was highly intellectual, acutely subject to excitement and suggestion and was surrounded by an over solicitous family. As a last resort she was put to bed at home under the supervision of a private nurse. With no other treatment and no dietary restrictions, recovery under this regime was prompt and complete.

The important point here is that while we had to utilize many different methods of precision for purposes of elimination, the end result was dependent upon ordinary clinical judgment unassisted by any positive laboratory test.

While the prevalence of functional disorders is well known, the exact mechanism of development is in most cases but little understood. Alvarez (8) in a recent article called our attention to the effects of the emotions on the gastro-intestinal tract. When our intellect is stirred, we are immediately aware of such factors, but normally we seem to be too intent upon grasping a gross pathological entity to recognize the many functional disturbances which may precede pathology.

To illustrate another point:—Mrs. F. W., age 35 years, housewife, entered a diagnostic institution on the 15th of March 1927. She stayed there one week. The complaints (13 years duration) were constipation, gaseous distension of the bowels, and at intervals vague colicky pains all over the abdomen. Occasionally she had seen small amounts of blood and mucus in the stools, especially after a severe period of constipation and at rare intervals a mild diarrhea lasting one or two days had been noted. The appendix had been removed. The laboratory work done at that time was as follows: Routine blood and urine, blood Wassermann and blood chemistry, sinus and dental x-rays, gastro-intestinal x-rays, stereoscopic x-ray of the chest and lipiodol insufflation into the fallopian tubes. The final diagnosis on the record was "Redundancy of the Transverse Colon." *Note:* No gastric analysis was done and there was no stool examination; yet the complaint was almost entirely gastro-intestinal.

This patient was referred to me in November 1928 with the same symptoms. A little more stress, however, was placed upon colicky abdominal pain and there had been some nausea and vomiting at irregular intervals. Analysis of the stomach contents after 50-minute Ewald showed no free acid. The same after a 2-hour Ewald—fractional. Histamine test was done—still no free acid. Stool examination was negative for amoebic cysts, ova and parasites. Proctoscopic examination: fairly normal mucous membrane throughout with considerable excess mucus and internal hemorrhoids. A smear taken from the sigmoid showed both pus and blood. Now note the difference in the conclusions with nothing more than thoroughness added to the original study. The diagnosis is achylia gastrica, mucous colitis, post-operative abdominal adhesions and hemorrhoids. Let me again emphasize what President Doege has recently stressed through the State Medical Journal, (9) namely, the importance of a complete diagnosis.

CONCLUSIONS

1. Obscure gastro-intestinal cases may require the use of every known technical method of investigation.
2. It is frequently necessary to study the more distant parts of the body (urinary tract, pelvis, and the common points of focal infection).
3. When methods of precision are used ex-

pert technique and experience in interpretation are imperative.

4. Diagnosis must be rational, and the results of studies in the laboratory must not lead us in an attempt to fit the patient to a particular disease, but must be viewed merely as a part of the whole clinical picture.
5. Correlation of findings by one head is a too much neglected phase of diagnosis.
6. Functional disorders are a more fruitful source of symptoms than organic diseases.
7. The volume and momentum of scientific investigation is bringing about disorder in this branch. We are much in need of more accuracy in the *science* and more diligence in the *art*.

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THE JOURNAL CLINIC

Malaria In Children[1]

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Three cases of malaria indigenous to Wisconsin and Minnesota have been observed in July and August of 1929. The case histories are appended. Malaria is not a common disease in Wisconsin. The disease is not reportable, hence no statistics are available. The State Board of Health reports that malaria occurred frequently in Wisconsin until about 1885 when it largely disappeared. In 1929 there were voluntarily reported four cases in addition to these three.[1] In the Milwaukee Children's Hospital the diagnosis of malaria has been established, previously in one case (tertian,) in the past fifteen years. The child was nine years of age.

TERTIAN MALARIA

A. O. white boy, age 10½ years, whose family history was unimportant, and whose birth and development were normal, was brought into the hospital on July 24th. He had been ill for two weeks. During this time he felt well during the morning, but toward late afternoon he complained of being sick, had a chill and a fever of 104° to 105° F which dropped suddenly with a profuse sweat. He had lost his appetite, lost some weight, was listless and generally doing poorly during this time. He had been in Milwaukee only four weeks, having spent the rest of his life in Red Wing, Minnesota. The past history was unimportant.

When seen first in the admitting room his temperature was 101°. He was quite prostrated and drenched in perspiration. His mucous membranes were quite pale, his spleen was enlarged four fingers below the costal margin—otherwise the physical examination was negative. In the morning, his temperature was 99°; he seemed comfortable and practically well. The spleen

[1] These case histories were presented before the Central States Pediatric Society, Sept. 27, 1929 by D. Koch, M. D.

was scarcely palpable, but blood smears were taken for malaria. These showed some suggestive organisms, but as they were not positive, a Widal and blood culture were made and found negative. His blood showed a Hb of 36%, WBC 5,400, 36% neut., 64% lymphocytes mostly large. His urine showed a trace of albumin and an occasional RBC. twenty-four hours after admission, his temperature rose to 104.8 but there was no chill. On the following day, however, he had a severe chill, lasting thirty minutes, his temperature reached 105.4 and smears were taken. These showed a tertian malarial infection. He was given quinine xxx grs. a day and had no more chills. This treatment was maintained for ten days—when after two negative smears and a normal temperature, he was discharged to be treated through the outpatient department.

MALARIA WITH MENINGISMUS

W. B. white boy age 11, whose family history was unimportant and whose birth and development were normal, was admitted on August 6th. He gave a history of having taken sick while at a boy's camp fifty miles north of Milwaukee about a week and a half previously. He had been running a fever in the morning, but felt better towards afternoon, getting up and playing. He had lost his appetite, complained of pain in his arms and legs and had frequent severe headaches. There had been a loss of about ten pounds in this interval. In 1925 he had a skull fracture and had been having headaches ever since. There had also been a behavior disturbance and change in character following this injury.

When seen first in the hospital at noon he had a temperature of 103°—a slightly stiff neck, a positive Kernig and a suggestively positive Babinski. The other reflexes were normal. His liver and spleen were just palpable. Otherwise the physical findings were normal. His blood count was Hb 60%, WBC 9,200, M. 64, stool showed occasional RBC—no typhoid. Sedimentation rate normal. Urine negative.

Because of the history of headaches and the findings a spinal puncture was done which showed normal fluid. Widal and blood cultures were negative. The first day his temperature was normal, but at 4:00 P. M. of the second day it had reached 104° only to fall to 97° by 12 P. M. The physical findings remained very much the same and another puncture was done—also a negative fluid. He continued with approximately the same findings and the same temperature until five days later when he had a chill before the rise in temperature. Smears were then taken every day for four days until a positive smear for malaria (tertian) was found. From the time of the first chill, then he had a definite chill each day preceding the temperature rise. He was placed on 25 gr. quinine on the 16th and had no more rises in temperature. He was discharged on August 20th, on quinine.

MALARIA SIMULATING "ACUTE ABDOMEN"

A. M. white girl age 8, whose family history was unimportant and whose birth and development were normal, was admitted on August 24th. She had been referred as having an "acute abdomen." She gave a history of having been ill a week. The onset was acute with a convulsion. Two days later she started to vomit and had a severe diarrhea. She had lost her appetite and seemed to be very ill. She had been in Milwaukee for one week, and had lived for over two years in Madison, Wisconsin.

When first seen in the admitting room, her temperature was 105° and she was prostrated. Her mucous membranes were pale, her skin rather lemon tinted. Her liver seemed markedly enlarged and there was a spasm over the R. U. Q. and tenderness. The spleen was barely palpable. There was marked distention of the abdomen. Otherwise the physical findings were normal. At 8:00 A. M. the next morning her temperature was normal, but there was still the enlarged liver and tenderness in the R. U. Q. The urine was negative. WBC 10,000, Hb 60%, N. 49, lymph. 47; LM 4.

She seemed to have recovered completely until the second night after her admission when her temperature again reached 105° at 8:00 P. M. The next morning it was

normal and smears taken were not positive with the next rise in temperature. Four nights after admission she had a slight chill and smears taken at this time were positive for tertian malaria. Quinine was started. She had no rise in temperature when the next chill was due, and there have been no further symptoms.

Malaria must be considered in the diagnosis of obscure fevers in children, in this region especially when the fever is intermittent in type. The diagnosis is not difficult if repeated blood smears are examined. The tertian malaria parasite is the most common form.

It is interesting to speculate as to the source of malaria infection in this state. A number of neurosyphilitics have now been inoculated with the malaria parasite, usually the tertian. The Anopheles mosquito is a native of this region. The transmissibility of the parasite from an artificially inoculated individual to a susceptible individual by the mosquito[2] seems quite possible in spite of reports to the contrary by Kopeloff.[3] This method of therapeutic inoculation is the only one authorized in Great Britain at the present time.[4] The sexual form of the malaria parasite is necessary in the human host for mosquito transmission.

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COMMON SKIN DISEASES

The early reports of the Commission on Medical Education, to which reference has been made in previous issues of The Journal, have furnished an important reminder that under the usual conditions of private practice about 75 per cent of the office visits are for minor surgery, upper respiratory infections, and general medical and venereal diseases; 90 per cent of the home visits are for infections of the respiratory tract, general medical and contagious diseases, obstetrics and minor surgery. One of the reports indicates further that more than 90 per cent of the illnesses are of types which cannot be controlled on a community basis but are problems of individual patients. Less than 10 per cent are diseases against which public health efforts are mainly directed. This fact is an index of the growing efficiency of public health efforts and also emphasizes the necessity of treating the patient as well as the disease. Such compilations give a reasonably accurate and useful indication of what the demands on the present-day general practitioner are likely to be. They suggest in turn where stress should be laid in the training and equipment of the medical student who is expected to meet these characteristic exigencies of practice. Without question it is of advantage to any physician as well as to his patient to be able to make a satisfactory diagnosis of the less common disorders and successfully meet the emergencies that they present.

With the growth of specialization, however, it has become more and more customary, as well as possible, to refer the problem patients to experts. Nevertheless, unless general medical practice is ultimately to resolve itself into an organization for the allocation of the sick to specialists, it is highly important that every general practitioner should become qualified to meet the commonest of daily situations satisfactorily with respect to diagnosis and to treatment. All too often the "heart patient" requires general medical care rather than, or as well as, the specific ministrations of a skilled cardiologist, and the patient suffering from the ubiquitous common cold may sometimes be managed better by the family physician than by the rhinologist or the laryngologist.

Dermatology represents one of the fields of medicine that seem to receive little serious attention from the general practitioner. It is well to remind him, therefore, that according to statistics collected by Goodman[1] of New York the varieties of cutaneous disorders (aside from the manifestations of syphilis) most commonly encountered belong in comparatively few categories. Eleven groups include nearly three-fifths (57 per cent) of all diagnoses for a total of little less than a million patients extending over half a century of recent and modern dermatology. The list of most common diseases has varied little despite recent advances in aids to clinical diagnosis. This means specifically that every practitioner should become familiar with eczema, acne, scabies, psoriasis, seborrhea, impetigo, urticaria, dermatitis venenata, tinea, alopecia, pediculosis and pruritus; these are the common skin diseases that he is most likely to see and to be asked to treat.—Editorial *Jour. A. M. A.*, Oct. 26, 1929.

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EDITORIALS

BRONCHOMYCOSIS

SINCE 1894 there have been many case reports of fungus diseases of the skin. Busse, 1894, reported in Germany a skin lesion which he diagnosed sarcoma. The patient developed a general infection and the organs of the viscera resembled those found in cases of pyemia. The organism isolated from this skin lesion and the visceral lesion, after a cultural and animal experimental study, was at first called sacchromyces homonis and later blastomyces. The lesion produced by this organism was a hyperplasia of the fixed tissue elements, lymphoid cell infiltration, epitheliod cell hyperplasia, and giant cell formation. This type of lesion can not be differentiated from that of tuberculosis on the basis of the cellular reaction. The organisms, however, can always be found in the lesion and differentiates the infection from tuberculosis.

In 1898 Gilchrist and Stokes reported a culture and animal experimental study of an organism isolated from a case at first diagnosed as lupus vulgaris. This organism was so much like the one described by Busse that it was classified as a blastomyces and the case was diagnosed blastomycetic dermatitis.

Ricketts, 1901, reviewed the case reports, described the pathology, and reported a complete experimental study of the organisms isolated from seventeen cases. This monograph is a complete treatise on blastomycetic dermatitis, and since this paper, the condition has been fixed in medicine as a clinical entity.

Generalized blastomycosis had not been so often reported. However, during the next few years following Ricketts' report, investigators in Chicago, notably, Hektoen, Ormsby, Montgomery, Hyde and Stober contributed largely to the literature on blastomycetic dermatitis and also reported many cases of generalized infection with a yeast-like fungus which produced the same type of lesion and appeared in the tissues as blastomyces. This they call generalized blastomycosis.

This type of fungus infection has been well worked out. However, little attention has been paid to fungi and fungus infections which can not be recognized as blastomycosis. The finding of a variety of fungi in sputa has received little attention and in fact primary fungus infection of the lung has been little studied. From the tropical countries Castellani, 1905, Sen, 1923, Paramanand, 1922, and Pyper, 1923, have reported cases of bronchitis due to monilia. In this country Boggs and Pincoffe, 1915, Simon, 1917, Steinfield, 1923, Johns, 1924, and Shaw, 1927, have reported the isolation of a yeast-like fungus, monilia, from the sputum of cases of pneumonia, bronchitis, and bronchitis with asthma. Stovall and Greeley reported last year eighteen cases of primary bronchomycosis due to a monilia. Sputum examination in the State Laboratory of Hy-

We Wish You A Happy Holiday Season

--The Editorial Board

giene show that it is not uncommon to find a yeast-like fungus in the sputa of patients suffering with chronic bronchitis, asthma, and obscure chest conditions. The cultural study of organisms isolated from such sputa show that monilia is the most frequent fungus encountered and that these organisms on the basis of sugar reactions can be classified into three types. These three types correspond to Castallani's Monilia Krusei, Monilia Metalondinensis and Monilia Tropicalis.

Broncho-moniliasis is described as mild, moderately severe, and severe. Many of the cases apparently recover. Primary bronchomycosis is little understood and is often mistaken for tuberculosis. The significance of yeast-like fungi in the sputum is still more or less speculative. It seems certain, however, that this field is ripe for fruitful clinical research. *W. D. S.*

TRIBUTES TO ERNST COPELAND, M.D., 1853–1929

ERNST COPELAND died on September 10, 1929, after a short illness that happily had little suffering in it. He went away quietly, as quietly and serenely as he had lived, as if wishing to make no more of a ripple on the surface of life than his friends could notice comfortably. He would not have them much disturbed. So it is with a feeling of uneasiness, almost of a violation of confidence, that a friend attempts to publish an appreciation of him as an individual. He was himself so selfless in all he did. In life he wanted no personal notice taken of his benefactions though there was no real secretiveness, no studied anonymity in his attitude. He was only selfless. The job counted, not himself, the doer of it. Yet, perhaps because of this, he went through life, with his friends and in the practice of his profession, impressing his personality, not his opinions, with an inevitableness that was compelling even though easy and comfortable.

We shall always remember Dr. Copeland as a young man in spite of his final seventy-nine years. He was always young in thought, feeling and bearing, and we had no sense of age when with him. In the later advances in medicine, and in the scientific attitude and ideals encouraged in the hospital where his interest was, he showed an appreciation of the work of younger men as only a mind young in spirit could. Most of his friends were many years junior to him, but he was always "Cope" to them. He had a dignity that was always cordial and young. He had always had it. It did not come with age.

While we, his friends, shall always remember him most vividly as a person, and think of him with a feeling of personal loss, we shall not forget what he did for medicine and for his city. A large part of what he had went to Columbia Hospital for the education and training of nurses, and to the Milwaukee Academy of Medicine for the support and housing of medical society activities. His other large interest was in art, as shown by his bequests to the Layton Gallery and to the Art Institute. But he gave more than material things to those who knew him best, in a personality and a companionship that cannot be replaced. He loved the beautiful and the out-of-doors. He shuddered at uncouthness, and discomfort for anyone. He himself lived for and in the finer things of life. He was a gentleman through and through. A. W. G.

GLIMPSES OF AN EARLIER MILWAUKEE

By BILL HOOKER

Do you remember when young Dr. Ernst Copeland established himself (about 1882) as a practicing physician in a wee little office on the west

(Continued on page XX)

THE PRESIDENT'S PAGE

F. J. Gaenslen

FAULTY BODY MECHANICS

THAT faulty body mechanics is a factor of considerable importance in the production of disabling conditions as well as of disease has been recognized for a long time. Results of examinations of pupils in our public schools have shown time and again that the majority of pupils have defects of major or minor importance, many of which could have been corrected by proper remedial measures at the proper time.

In order to conserve human efficiency and energy physicians may well pay closer attention to posture in their routine physical examinations, as physical defects are more readily corrected in their incipiency than at a later stage when structural bony changes have occurred. In the normal posture the chest is well expanded and the ribs are elevated, giving the chest the greatest anteroposterior diameter in this position. The thoracic organs are not crowded and the respiratory function and heart action are not interfered with. That defective aeration of the lungs is a contributing factor in tuberculosis requires no argument. In the correct posture the important organs in the upper portion of the abdomen, the region aptly described by Crile as the region "where we live," are in proper position for normal function, whereas in the patient with flat chest and prominent abdomen general visceroptosis and intestinal stasis with its attendant train of toxic symptoms may be looked for. The suggestion may not be far-fetched that the endocrine system, especially in the growing child, may be seriously affected by the relative starvation due to impaired pulmonary and circulatory functions and by toxic absorption associated with defective posture.

We know that in certain families tendencies to certain diseases exist. This has been interpreted to indicate that we inherit tissues of different resistance and that the tissues hereditarily weak are hardest hit by circulating toxins or impoverished blood supply. This may explain why in some there is a predisposition to joint changes, in others to early deterioration of the tissues of the heart and blood vessels or of the nervous system.

It is still true that in many cases of scoliosis the diagnosis is made by the dressmaker and this at a time when bony changes are well under way. The simple test of forward bending in the effort to touch the floor with the finger tips will disclose changes in symmetry of the back which are apparent to the layman even in the milder cases. Careful examination of the feet in young children is also often neglected with the result that confirmed flat feet develop.

The point in the argument is this, that most defects worthy of attention are readily recognized if one but looks for them, and more than this, that every mother of average intelligence may be taught simple tests to put her children through at monthly intervals so that developing defects may receive proper attention at the proper time.

THE STATE MEDICAL SOCIETY OF WISCONSIN

ORGANIZED 1841

Officers, 1929

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S. J. SEEGER, Milwaukee, Speaker
C. A. HARPER, Madison, Vice-Speaker
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8th Dist., T. J. Redelings ..Marinette

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10th Dist., H. M. Stang ..Eau Claire

TERM EXPIRES 1930
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LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES

County	President	Secretary
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Barron-Polk-Washburn-Sawyer-Burnett	J. A. Diamond, Frederic	S. R. Medley, Shell Lake.
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Dane	H. H. Reese, Madison	C. K. Schubert, Madison.
Dodge	L. M. Bachhuber, Mayville	A. A. Hoyer, Beaver Dam.
Door	John Hirschboeck, Forestville	T. C. Proctor, Sturgeon Bay.
Douglas	E. A. Myers, Superior	J. W. McGill, Superior.
Eau Claire and Associated Counties	F. S. Cook, Eau Claire	E. E. Tupper, Eau Claire.
Fond du Lac	R. L. Prees, North Fond du Lac	H. R. Sharpe, Fond du Lac.
Grant	E. H. Spiegelberg, Boscobel	M. B. Glasier, Bloomington.
Green	Edward Blumer, Montlcello	J. F. Mauermann, Monroe.
Green Lake-Waushara-Adams	C. U. Senn, Ripon	A. J. Wiesender, Berlin.
Iowa	A. D. Brown, Mineral Point	H. M. Walker, Dodgeville.
Jefferson	E. W. Bowen, Watertown	M. G. Peterson, Lake Mills.
Juneau	C. A. Vogel, Elroy	A. T. Gregory, Mauston.
Kenosha	H. A. Binnie, Kenosha	Margaret Pirsch, Kenosha.
La Crosse	N. P. Anderson, La Crosse	J. E. Heraty, La Crosse.
Lafayette	R. B. Quinn, Darlington	W. B. Williams, Argyle.
Langlade	P. J. Dailey, Elcho	J. C. Wright, Antigo.
Lincoln	E. K. Morris, Merrill	W. H. Bayer, Merrill.
Manitowoc	J. E. Meany, Manitowoc	A. P. Zlatnik, Two Rivers.
Marathon	W. A. Green, Wausau	Verne E. Eastman, Wausau.
Marinette-Florence	T. J. Redelings, Marinette	M. D. Bird, Marinette.
Milwaukee	H. J. Gramling, Milwaukee	E. L. Tharinger, Milwaukee.
Monroe	J. M. Scantleton, Sparta	H. H. Williams, Sparta.
Oconto	R. J. Goggins, Oconto Falls	G. W. Krahn, Oconto Falls.
Oneida-Forest-Vilas	C. D. Packard, Rhinelander	I. E. Schlek, Rhinelander.
Outagamie	G. J. Flanagan, Kaukauna	C. D. Neidhold, Appleton.
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Portage	C. von Neupert, Stevens Point	F. R. Krembs, Stevens Point.
Price-Taylor	F. W. Mitchell, Ogema	G. E. MacKinnon, Prentice.
Racine	John Docter, Racine	Susan Jones, Racine.
Richland	W. C. Edwards, Richland Center	G. Benson, Richland Center.
Rock	F. B. Farnsworth, Janesville	H. E. Kasten, Beloit.
Rusk	L. M. Lundmark, Ladysmith	
Sauk	E. McGrath, Baraboo	Roger Cahoon, Baraboo.
Shawano	R. C. Cantwell, Shawano	C. E. Stubenvoll, Shawano.
Sheboygan	C. J. Weber, Sheboygan	R. L. Zaegel, Sheboygan.
Trempealeau-Jackson-Buffalo	F. T. Weber, Arcadia	R. L. MacCornack, Whitehall.
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Waupaca	T. E. Loope, Iola	A. M. Christofferson, Waupaca
Winnebago	D. J. Ryan, Neenah	W. N. Linn, Oshkosh.
Wood	D. Waters, Wisconsin Rapids	W. G. Sexton, Marshfield.

SOCIETY PROCEEDINGS

ASHLAND–BAYFIELD–IRON

Seventeen members of the Ashland–Bayfieid–Iron County Medical Society met at the Knight Hotel, Ashland, on Tuesday evening, October 29th, for the annual meeting of the society. Dr. J. W. Prentice, formerly of Amery and now located in Ashland was transferred from the Pierce–St. Croix County Medical Society to the tri-county society. The society also voted to accept the application for membership of Dr. John M. Dodd, Jr., of Ashland. Dr. M. L. Young, secretary-treasurer, gave the annual report.

Election of officers resulted in the election of Dr. W. J. Tucker, Ashland, president; Dr. H. F. Ringo, Montreal, vice president; Dr. M. L. Young, Ashland, secretary-treasurer, and Dr. C. J. Smiles, Ashland, reelected censor for three years.

Following the transaction of business the society heard Mr. George Crownhart, secretary of the State Society, explain the subject of future activities of the State Society. Following a full discussion, it was voted unanimously to instruct the delegate from Ashland-Bayfield-Iron County Society to favor the proposed expansion. M. L. Y.

BROWN–KEWAUNEE

The Brown-Kewaunee County Medical Society held its regular meeting in the Crystal room of the Northland hotel, Green Bay, on October 22nd at six o'clock. A turkey dinner was served to forty members and guests from surrounding medical societies.

Dr. Harold Marsh of the Jackson Clinic gave a very interesting talk on "Diagnosis and Treatment of Cardiac Lesions." He went over the field very thoroughly and talked at considerable length on the more common lesions of the heart. He illustrated the pathological findings by blackboard drawings.

Dr. Arnold S. Jackson of the same clinic read a paper on "Spinal Anesthesia" in which he stated that the inhalation is rapidly losing its place as a general anesthesia and the time is not far distant when spinal anesthesia will be in general use. Dr. Jackson also showed motion pictures illustrating a number of major operations done under spinal anesthesia. One in particular that was very interesting was the removal of the appendix from an eleven year old boy. There was no general business transacted due to the length of the program.

M. H. F.

CHIPPEWA

Dr. W. A. Plummer and Dr. F. W. Gaarde, both of the Mayo clinic, Rochester, addressed members of the Chippewa County Medical Society on Tuesday, November 5th, at Chippewa Falls. Dr. Plummer spoke on "The Early Diagnosis of Diseases of the Thyroid,"and Dr. Gaarde on "The Value of Skin Sensitization Tests in the Diagnosis of Asthma and Allied Conditions." Discussions were opened by Dr. S. E. Williams and Dr. F. T. McHugh, respectively. W. C. H.

DODGE

A meeting of the Dodge County Medical Society was held in Beaver Dam on Tuesday evening, November 5th, at the Lutheran Deaconess hospital. Modern treatment of interest and rare cases were demonstrated in a clinic conducted by Dr. L. F. Jermain, Milwaukee. A. A. H.

DOUGLAS

The November meeting of the Douglas County Medical Society was held on Wednesday, November 6th. Dr. W. D. Stovall, of the state laboratory of hygiene, Madison, addressed the members and three reels of motion pictures of interest to the medical profession were shown. J. W. McG.

EAU CLAIRE

The members of the Eau Claire and Associated Counties Medical Society met in joint session with the Chippewa County Medical Society to hear Dr. J. B. Carey of the Nicollet Clinic, Minneapolis, and Mr. George Crownhart, secretary of the State Society, on Monday evening, October 28th. Dinner was served promptly at 6:30 at the Hotel Eau Claire following which Dr. Carey spoke on "Gastro-Intestinal Disorders and Their Management." Mr. Crownhart talked on future activities of the State Society. A discussion followed. The Society voted unanimously favoring the proposed extension of activities for the State Society. E. E. T.

GREEN

The fall meeting of the Green County Medical Society was held Tuesday, November 12th, at Hotel Ludlow, Monroe. At a short business session, preceding the scientific program, Drs. E. F. Dettmann and Rodney Gray were voted into membership in the society. The secretary-treasurer's report was accepted and by unanimous vote the society adopted a resolution on the death of Dr. W. B. Monroe of Monroe.

Dr. J. S. Evans, professor of medicine at the University, spoke on "Hypertension;" Dr. Ira R. Sisk, professor of urology, on "Practical Points in Urology;" Dr. Erwin R. Schmidt, professor of surgery, "Central Nervous System Diagnosis," and Mr. George Crownhart, secretary of the State Society, on "The Future of the Wisconsin State Medical Society."

Following discussion of Mr. Crownhart's presentation the society voted unanimously to instruct its

delegates to favor an increase in the dues to the end that the State Society might deal with some of the major problems that now confront the profession.
J. F. M.

LA CROSSE

The regular monthly meeting of the La Crosse County Medical society was held in Pioneer Hall, Tuesday evening, November 19th. The meeting was called to order by the president, Dr. N. P. Anderson. About thirty-five members were present. George Crownhart, secretary of the State Medical society gave a talk on the state society, its functions and accomplishments, and why it was necessary to raise the dues $5.00 per year. His talk was very well received.

Dr. F. J. Gaenslen, president of the State Medical society, gave a very interesting talk on his recent European trip, together with hospitals, clinics and conventions attended. He talked for some length on interesting orthopedic conditions and treatments.

Dr. Robert E. Flynn, chairman of the committee concerning more liberal parking time for physicians, reported that in an interview with the chief of police, the police will cooperate with the physicians in any way possible and he would correspond with different cities having such regulations. J. E. H.

LINCOLN

The annual meeting of the Lincoln County Medical society was held Thursday, November 14th, at the Holy Cross hospital at Merrill. Following the business session and dinner, Dr. John W. Powers, Milwaukee, addressed the members on "New Treatment for Ununited Fractures of the Neck of the Femur." W. H. B.

MARINETTE–FLORENCE

The Marinette Florence County Medical society held an open meeting Friday evening, November 1st. Miss Mildred Kolar, city nurse, gave a paper on school nursing. Dr. J. W. Boren, city health officer, spoke on local health conditions, and Dr. C. A. Harper, state health officer, gave a very interesting talk on public health.

Dinner was served at 6:30 at the Hotel Marinette and about twenty-five members and guests enjoyed the repast. Dr. Harper, in his address, urged an annual physical examination for all persons and more often where it is deemed necessary. He appealed to physicians to help in promoting this idea as there was no more efficient method of disease prevention. He also urged the vaccination of infants within ten days after birth and the administration of toxin-antitoxin within the six month's period. Dr. Harper illustrated his address with several charts and delivered a discourse that aroused keen interest and imparted much valuable information. M. D. B.

OUTAGAMIE

About fifty physicians attended a meeting of the Outagamie County Medical Society at Hotel Kaukauna Tuesday evening, November 5th. Physicians from Sheboygan, Oshkosh, Appleton, Fond du Lac, Neenah, Chilton, Menasha, Black Creek, Shiocton, Little Chute, Kimberly and Hortonville were present.

Dr. Alfred A. Strauss, Chicago, was the speaker of the evening, giving a lecture illustrated by lantern slides. A six thirty dinner was served to the members and guests. C. D. N.

PRICE–TAYLOR

Dr. F. W. Mitchell, Ogema, was elected president of the Price-Taylor Counties Medical Society at the October meeting of the organization. Dr. W. P. Sperry, Phillips, was chosen vice president and Dr. G. E. MacKinnon, Prentice, secretary-treasurer. G. E. M.

RACINE

A joint meeting of the Racine County Medical Society and the Racine County Dental Society was held Wednesday, November 27th, at the Hotel Racine. Dr. G. V. I. Brown, Milwaukee, professor of plastic surgery, University of Wisconsin, spoke on the subject of "Plastic and Oral Surgical Considerations That Are Important to the Practice of General Surgery, Dentistry and Medicine." A turkey dinner was served at six-thirty o'clock. S. J.

WALWORTH

Dr. E. L. Miloslavich, director of the department of clinical pathology at St. Mary's hospital, Milwaukee, addressed the Walworth County Medical society at Lake Geneva on October 8th on "The Importance of Post Mortem Examinations to the General Practitioner."

WASHINGTON–OZAUKEE

Dr. R. M. Waters and Dr. J. W. Harris, both of the University of Wisconsin Medical School, addressed members of the Washington–Ozaukee County Medical Society on Thursday afternoon, November 14th, Dr. Waters, professor of anesthesia, discussed "Ether Anesthesia" and Dr. Harris, professor of obstetrics, talked on "Puerperal Sepsis."

George Crownhart, secretary of the State Society, explained the proposed extension of the work of the society. A general discussion followed. The Washington-Ozaukee County Society voted unanimously to instruct its delegate to vote for the proposed extension. P. M. K.

MILWAUKEE ACADEMY

Dr. F. C. Mann, Mayo Clinic, was the speaker of the evening at the meeting of the Milwaukee Academy of Medicine on Tuesday, November 12th. "Observations on Reduced Liver Function" was the subject of his paper. Dr. R. W. Benton, Milwaukee, presented a case report on "Malignancy of the Chest." D. E. W. W.

MILWAUKEE OTO-OPHTHALMIC

The November meeting of the Milwaukee Oto-Ophthalmic society was held on Tuesday evening,

November 19th, at 6:30 at the Wisconsin club, Milwaukee. Mr. W. C. Barker of the Bausch and Lomb company demonstrated the improved stereocampimeter including its use in muscle exercise and fusion training. E. R. R.

MILWAUKEE ROENTGEN RAY

A joint meeting, by invitation of the Chicago Roentgen society, was held by this society and the Milwaukee Roentgen Ray society at the Virginia Hotel in Chicago on November 14th. Papers were read by Dr. E. J. Carey on "The Physiology and Pathology of Bone Growth;" Dr. F. J. Hodges, "The Teaching Value of a Roentgen Film," and Dr. Frank Mackoy "Gastro-Intestinal Diverticuli and Associated Diseases." The papers were discussed by Drs. D. B. Phemister, E. L. Jenkinson and M. J. Hubeny.

NORTH CENTRAL UROLOGICAL

At a meeting of the North Central Branch of the American Urological Association in Rochester on November 21st and 22nd, Dr. Ira R. Sisk, Madison, was elected president for 1930. During the meeting Dr. George H. Ewell of Madison read a paper entitled, "Technique of Spinal Anesthesia," and Dr. W. J. Carson, Milwaukee, discussed "Pyelitis, Ureteritis, and Cystitis Cistica."

UNIVERSITY OF WISCONSIN

Through the courtesy of the American Society for the Control of Cancer, the Canti moving picture film was shown to the members of the University of Wisconsin Medical society on Friday, November 15th, at the Service Memorial institute, Madison. This film depicts research work in cancer tissue cultures, as well as diagnosis and treatment of malignant disease.

Dr. P. F. Greene, associate professor of surgery, gave a review of the last twenty weeks to determine if and how much cancer was increasing. Dr. C. H. Bunting, professor of pathology, spoke on "Medical Knowledge and Public Education Regarding Malignant Growths."

FIRST AND THIRD DISTRICT

Medical men of southern Wisconsin, members of the First and Second Councilor district, were treated to a cancer symposium at the Hotel Loraine, Madison, on November 14th, which brought vivid glimpses into the results of cancer research and breathed hope for all cases for which early diagnosis and treatment are obtained. Dr. Joseph Colt Bloodgood, Johns Hopkins surgeon and leader in cancer education, held the attention of 150 practitioners as he conducted a personal appraisal of cancer patients brought to this clinic by the Wisconsin General hospital, and examined many physician delegates for suspicious skin cancer signs.

Dr. Phillips F. Greene offered results of a recent statistical study of cancer deaths based on death certificates filed with the state board of health. He concluded that cancer is primarily a disease of later life, as indicated by the fact that last year about 64 per cent of cancer deaths in the state were in persons over 60 years of age. The disease does not usually appear until or after 40 years of age. It is at ages 85 to 90 that the mortality rate is at its highest, but the relatively small group living at these ages is a factor in the high rate. Dr. Greene inferred there is no ground for believing that cancer is becoming more common in the early age groups.

Dr. Bloodgood was emphatic in telling the medics to watch their own bodies closely for signs of beginning cancer. Many physicians came forward and exhibited skin growths—on the face, forehead, hand and leg. To each he gave his opinion—quick, decisive, emphatic, if warranted. A cyst below the eye was cause for an injunction to have it treated surgically. Other growths were referred for observation, and still others were pronounced negative in character.

"Periodical examinations and the education of the public offer our best hope," he told them. "We must get these truths to the school children. They are among the most willing health exponents we have in our ranks.

"We can no longer expect our millionaires to finance research on a sufficient scale to do what is so urgently needed," he said. "Those who are backing this research movement feel that the money for such research, if and when it is raised, should go largely to the laboratories for medical science in our great universities, and they promise that it will be properly expended for the country's best good."

Dr. Bloodgood asserted that Rotary and similar clubs can help in creating a public opinion that will favor spending public money for medical research.

"When I entered medicine," he said, "typhoid fever was good business for the doctor, but bad for the people. Now typhoid fever is well nigh wiped out. Research is not good business for the doctors but is good business for the people. And our medical men go right on trying to find new ways for wiping out more of our destructive diseases. Educational effort is the only thing today that promises to control cancer. Every time that medical science discovers a cure for a disease, that disease is no longer of financial value for the medical profession.

"The growth of periodic examinations is going to stamp out many diseases."

Other speakers on the scientific program were Dr. Phillips F. Greene, Madison, Dr. William F. Lorenz, Madison, Dr. Paul A. O'Leary and Dr. W. A. Plummer, both of Rochester, Minn. Dr. Greene presented important statistics on cancer, Dr. Lorenz spoke on "The Psychosis of Change of Life." "Developments in the Diagnosis and Treatment of Syphilis" was the subject of the address by Dr. O'Leary and Dr. Plummer discussed "A Phase of the Thyroid Gland."

Dr. A. E. Bachhuber, Mayville, was chosen president of the First Councilor district for 1930. Dr. J. B. Noble, Waukesha, was elected vice president and Dr. Francis Wilkinson, Oconomowoc, secretary.

NINTH DISTRICT

A joint meeting of the Marathon County Medical Society and the Ninth Councilor District Medical Society was held at Wausau on the afternoon and evening of November 21st. The sessions opened with a pediatric clinic at St. Mary's hospital by Dr. C. G. Grulee, clinical professor of pediatrics, Rush Medical College, Chicago. Following dinner at the Wausau club Dr. M. L. Jones, Wausau, presented a paper on "Hand Injuries;" Dr. S. G. Schwarz, Marshfield, spoke on "Some Impressions of the Dermatological Clinics Abroad," and Dr. C. G. Grulee discussed "Infant Feeding."

J. F. S.

W. A. T. A.

Celebration of the "coming-of-age" of Wisconsin's organized fight against tuberculosis was observed at the annual meeting of the Wisconsin Anti-Tuberculosis association held at Milwaukee on November 14th and 15th. It was homecoming for the 350 public health nurses who have been graduated from the health service training school of the association.

Discussion of tuberculosis sanatorium problems, child health problems, and tuberculosis in industry were the three outstanding subjects. Speakers on the program included: Drs. Robinson Bosworth, superintendent, Rockford Municipal Tuberculosis Sanatorium, Rockford; Alfred J. Roach, superintendent, Pureair Sanatorium, Bayfield; Oscar Lotz, W. A. T. A. staff, Milwaukee; T. Oschner Nuzum, Pinehurst sanatorium, Janesville; Dr. Hoyt E. Dearholt, executive secretary, W. A. T. A.; E. V. Brumbaugh, Milwaukee Health department; R. D. Thompson, superintendent, State Sanatorium, Wales; J. W. Coon, River Pines sanatorium, Stevens Point; Charlott Calvert, State Board of Health; A. A. Pleyte, W. A. T. A. staff; Thomas Dobbins, Kenosha; Florence E. MacInnis, W. A. T. A. staff; W. W. Bauer, Racine Health Commissioner; Charles Ide, Milwaukee, and Mr. Theodore Wiprud, secretary, Medical Society of Milwaukee county.

NEWS ITEMS AND PERSONALS

The personality of the late Dr. Ernst Copeland, who was one of the most beloved of Milwaukee's physicians is reflected in the thirty-six oil paintings which he collected and which were shown at the Layton Art gallery from November 7th to December 5th.

All but three of the pictures were bequeathed to the Layton Art gallery. Two were borrowed from the University club and one from Columbia hospital. His water colors and etchings will be shown later.

Many of the pictures were purchased long before the artists had achieved fame. Some were bought from showings in Milwaukee when the artists were accused of being too modern, but whose work seems strangely conventional in the light of the art of the past decade.

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A summary of deaths from communicable diseases in the state during the first nine months, as compared with the same period of 1928, indicates that diphtheria and tuberculosis continued their downward trend, while other diseases were marked by increased fatality.

In respect to the better showing of diphtheria, the bureau pointed to the fact that more children were immunized with toxin-antitoxin this year than last. The total of 52 diphtheria deaths during the period was termed a new low record, for which toxin-antitoxin was primarily responsible.

Deaths exceed last year's record at this time in measles, scarlet fever, typhoid fever, and whooping cough.

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In an address before the mothercraft training society of the Maternity hospital, Milwaukee, Dr. J. P. Koehler, commissioner of health, advised mothers to cooperate with his department in an effort to raise health standards in Milwaukee.

"All mothers should regard themselves as deputy commissioners of health, because they know what is going on in their families," said Dr. Koehler. Since the aims of the health department and the mothers are the same they should cooperate to the fullest extent."

Dr. and Mrs. Milton Rosekrans have established a practice at Neillsville. Dr. Milton and Dr. Sarah Rosekrans are graduates of the Medical School at the University of Minnesota.

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A committee of the University of Wisconsin regents have been investigating children's hospitals in other states preparatory to erection of the $500,000 orthopedic hospital for children won during the last legislative session by the Wisconsin Association for the Disabled. The hospital is to operate in connection with Wisconsin General hospital, which, is a part of the University Medical school, and for indigent persons over the entire state.

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Dr. C. F. N. Schram, plant physician of Fairbanks, Morse & Co., Beloit, addressed the National Association of Industrial Physicians and Surgeons at its meeting at Chicago in October. He chose as his subject "The Present Status and Qualifications of the Industrial Surgeon."

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Dr. G. V. I. Brown, Milwaukee, was chosen as speaker of the assembly of the Interstate Post Graduate Medical organization in session at Detroit during October. Dr. Edwin Henes, Jr., also of Milwaukee, was reelected executive secretary and

director of exhibits. Other officers chosen are: Drs. William and Charles Mayo, Rochester, Minn., presidents of clinics, and Dr. Henry Langworthy, Dubuque, treasurer and director of foundation fund.

Dr. William D. Haggard, Nashville, Tenn., elected president of the body last year, assumed office at the sessions. Minneapolis was chosen as the convention city for 1930.

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Dr. R. D. Thompson, head of the State Sanatorium at Wales addressed members of the Waukesha Optimist club recently. He gave interesting sidelights of the work being done at the institution that are not generally known.

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Dr. Solomon Baumgarten, Milwaukee, x-ray director of the Seelman laboratories, sailed with his family for Europe the last week in October. He will do post graduate work at Vienna, confining his studies to roentgenology.

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Excellent progress in Wisconsin maternity and infancy work is reported by the children's bureau of the department of labor in a study issued recently showing that last year the state again used the full federal appropriation available to it under the act of 1922.

Last year $52,055 was spent in Wisconsin in this work, of which $29,303 was federal and $22,751 was state funds. The former figure was larger than the latter because of slight accruals from previous years.

The progress in Wisconsin is illustrated by the fact that in 1927, the last year for which figures were available, the infant mortality rate reached its lowest level since the state entered the birth-registration area.

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Dr. Irwin Schulz has announced opening of offices at 514 Wells building, 120 East Wisconsin avenue, Milwaukee. He will limit his practice to surgery and surgical diagnosis.

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Galesville's three medical men, Dr. H. A. Jegi, Dr. George Christianson and Dr. R. L. Alvarez have become associated under the name of the Galesville clinic. The physicians are to be housed in the buildings owned by Dr. Jegi and Dr. Christianson, which are adjoining and which have now been converted into one building. Each physician will have his own private consultation room with joint operating and waiting room.

By this change the Galesville physicians hope better to serve their community and by joining forces will be able to carry on their work more efficiently.

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Dr. D. A. Maas, formerly of Danbury, has now established offices at Webster. Dr. Maas graduated from the Chicago College of Medicine and Surgery in 1916.

Dr. William Snow Miller, emeritus professor of anatomy at the University of Wisconsin, was elected an honorary member of the Connecticut State Medical society at the annual meeting of that society recently.

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Dr. A. M. Rauch, Chilton, who has been associated with Dr. J. F. Bennett of Burlington during the past year, has opened offices at 3607 Roosevelt Road, Kenosha, where he will engage in general practice.

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The Fifth International Congress of Physiotherapy will meet at Liege, Belgium, from the 4th to the 8th of September, 1930. This session will take place in Liege on the occasion of the International Exposition and the Centinary of Independence. Dr. William Benham Snow, 1650 Broadway, New York City, is president of the American section of the congress.

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A large number of physicians in the state will be sorry to learn of the death, on October 30th, of Mrs. Matie E. Armstrong, wife of Dr. Charles A. Armstrong, Prairie du Chien. Mrs. Armstrong had been in ill health for several months and failed to rally following an attack of pneumonia.

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Dr. Edward L. Miloslavich, Milwaukee, spoke on "Health in Industry" at a meeting of the Industrial Relations association of Wisconsin on November 20th at Kenosha.

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Among Wisconsin physicians who attended the meeting of Northwestern Railway company surgeons at Chicago during November were: Drs. G. L. Karnopp, Wautoma; Drs. H. E. and D. J. Twohig, E. J. Breitzman, F. S. Wiley, and A. J. Pullen, Fond du Lac; Dr. Martin T. Blewett, Markesan, and Dr. R. L. Prees of North Fond du Lac.

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In memory of Dr. Ernst Copeland, who gave the Milwaukee Academy of Medicine $65,000 of the equity in its building at 153 East Wells street, Milwaukee, a bust of him was presented to the Academy recently. The original clay bust was presented by Dr. Henry B. Hitz, who modeled it from life. It will be sent to New York City to be cast in bronze.

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Dr. H. P. Weiland, formerly of Verona, has opened offices in the new Rupp building, Madison. Dr. Weiland is a graduate of the Chicago College of Medicine and Surgery and served his interneship at Madison General hospital in 1915 and 1916.

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"Keeping Fit and Rendering Service," was the subject of an address given by Dr. J. C. Elsom, professor of physical therapy at the University of Wisconsin, at a recent session of the Janesville police school.

Dr. Paul F. Doege, who has been studying pathology and surgery in Boston, Mass., the past three years, will become a permanent member of the Marshfield clinic staff on or about February 1st.

Dr. Doege is the second son of Dr. K. W. Doege, president of the clinic, and a brother of Dr. K. H. Doege, also a member of the clinic staff.

A recent addition to the clinic staff is Dr. F. A. Boeckmann, formerly of Greenwood. Dr. Boeckmann left Greenwood about a year ago to pursue a post graduate course in internal medicine at the University of St. Louis.

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"Accidents" and not disease stand first as the most common cause of deaths for people under fifty years of age. This announcement was made by the State Board of Health recently after a thorough study of all the causes of death during the past year. The automobile has become an agency to cheat disease and old age of many lives.

—Δ—

Dr. Carl W. Eberbach, Milwaukee, addressed members of the Professional Men's club at the Athletic club, Milwaukee recently. He spoke on "Medicine in Labrador."

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Dr. L. F. Corry, who has been practicing in Menasha for the past year, opened offices at Weyauwega in November. Dr. Corry is a graduate of St. Louis University School of Medicine in 1926.

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Tularemia, a disease contracted from contact with certain infected wild animals, has appeared to a limited extent in Wisconsin this year, the bureau of communicable disease of the state board of health reported recently. The board recorded six human cases last year, and thus far has evidence of four cases this year. In Wisconsin wild rabbits are generally held as the chief carriers of the disease, which in humans runs a course similar to blood poisoning.

Although thousands of wild rabbits are shot in Wisconsin in the fall and winter, tularemia in human beings is comparatively rare. The possibility of a protracted illness from it, however, prompted the state board of health to list the precautionary measures that are effectual in preventing tularemia.

The human cases in this state were found to have come in contact with wild rabbits, usually in the process of skinning them or preparing the meat for the table. Insufficient cooking may be a further factor in the transmission of tularemia.

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Dr. S. Plahner, Milwaukee, was the speaker of the evening at the recent meeting of the Principals' Association of the Milwaukee Public Schools on November 13th. His subject was, "The Problem Child in School."

NEW MIDELFART CLINIC BUILDING AT EAU CLAIRE

The two upper floors of this building, added during the fall, will be devoted to modern quarters for Drs. Midelfart and associates beginning the first of January. The entire building has been purchased by the clinic, the two upper floors being added for the clinic proper, and the lower floors will continue to be rented for general office space.

BIRTHS

Dr. and Mrs. Arnold Jackson, Madison, are the parents of a daughter born Tuesday, November 19th, at the Methodist hospital.

MARRIAGES

Dr. John F. Stein and Miss Freda R. Handow, both of Oshkosh, on August 29th.

Dr. F. P. Daly, Reedsburg, and Mrs. Elizabeth Jerome, La Valle, Saturday, November 16th, at La Crosse.

DEATHS

Dr. Lee M. Willard, Wausau, died on November 8th at a Cleveland hospital where he had been under treatment for several weeks. Dr. Willard had been ill for some time but his condition was not thought to be serious. An operation was performed a week previous to his death and from this he did not rally.

The deceased was born at Neenah, October 2, 1868 and graduated from the College of Physicians and Surgeons at Chicago in 1891. Following his graduation he served a year at the Illinois Charitable Eye and Ear infirmary at Chicago. He practiced at Merrill and in 1892 opened offices at Wausau where he has resided since.

Dr. Willard was a member of the Marathon County Medical society, at one time serving as its president, the State Medical Society of Wisconsin, the American Medical Association, and was a fellow of the American College of Surgeons. His wife survives him.

Dr. Edward L. Herrick, Kenosha, died at Rochester, Minn., on Sunday, November 3rd following an illness of several weeks. Dr. Herrick was born near Lake Geneva, February 24, 1867, and graduated from the Cleveland University of Medicine and Surgery in 1885. The deceased had practiced medicine in Kenosha for the past fifteen years. He was a member of the Kenosha County Medical society, the State Medical Society of Wisconsin and the American Medical Association. Surviving him are his wife and a son.

Dr. Joseph P. Donovan, Madison, died at his home on November 16th after an illness of almost four years. Dr. Donovan was born in Madison April 4, 1874 and graduated from the Chicago College of Physicians and Surgeons in 1900.

After serving his interneship in St. Elizabeth's hospital, Chicago, and the Milwaukee Emergency hospital, Dr. Donovan came to Madison and opened an office in 1903. He served as city health officer from 1904 to 1917. Surviving him are his wife and four children.

SOCIETY RECORDS

New Members

Ritchie, Gorton, Wisconsin General Hospital, Madison.
Voellings, W. J., 1032 Greenfield Ave., Milwaukee.
Lieberman, Benj., 2629 No. Avenue, Milwaukee.
Swenson, G. B., Baldwin.
Perrin, Stuart H., Star Prairie.
Ingersoll, R. S., Oxford.
Elliott, Mary H., Box 253, Sparta.
Lechtenberg, E. H., 107 N. Madison St., Lancaster.
Goggins, G. F., De Pere.
Dodd, J. M. Jr., The Clinic, Ashland.
Wirig, M. H., 22 No. Carroll St., Madison.
Andruszkiewicz, Elizabeth, 439 Mitchell St., Milwaukee.
Ruppenthal, A. J., 308 North Avenue, Milwaukee.
Davidoff, I. Z., 40 Center St., Milwaukee.
White, C. L., 704 Oakland Ave., Milwaukee.
Nobles, Byron O., 427 Mitchell St., Milwaukee.
Hermann C., Weber, 5121 National Ave. West Allis.
Bradford, Carl W., Hudson.

Changes in Address

Stirn, F. J., Dubuque to Milwaukee.
Lawler, C. F., Hilbert to Birmingham, Mich.
Burke, Myra T., Kenosha to Kendall.
Towne, W. H., Shiocton to Hortonville.
Ott, H. A., Dale to Neenah.
Seiler, Elizabeth S., Kenosha to Milwaukee.
Trentzsch, M. W., Highland to Evansville.
Le Wohl, F. H., Pestigo to Madison.
Dudley, L. W., Chicago to Sanator, S. Dak.
Wood, C. A., Madison to Freeport, Ill.
Harris, C. F., Ashland to Stanley.

CORRESPONDENCE

COUNTY HEALTH DEPARTMENTS

STATE BOARD OF HEALTH
Madison, Wisconsin

November 6, 1929.

Mr. J. George Crownhart,
Secretary, State Medical Society,
Washington Building,
Madison, Wisconsin.

Dear Mr. Crownhart:

In response to your recent request in which you ask for information in regard to the organization of a county health department organized under the new Wisconsin law, we are pleased to submit the following for your consideration.

Other states which are successfully operating under similar laws have found that the minimum personnel, in addition to the full-time trained health officer, should be at least one public health nurse, one sanitary officer and one office clerk. Under ordinary conditions the health officer with the assistance of the sanitary officer should be able to administer the laws and rules governing the control of communicable diseases. In addition to the regular personnel of the county health organization arrangements should be made with township and village officials in the outlying districts for additional personnel during epidemics. We would consider this a minor detail in the administration of the law.

In addition to the work of controlling communicable diseases, a competent full-time health officer

will maintain a continuous campaign of education in the preventive field and should be of material assistance to the medical profession in selling to the public smallpox vaccination, the administration of toxin-antitoxin to children and similar programs.

In looking over the United States Public Health Service Report dated May 17, 1929 we find that Alabama has fifty full-time county or district health units working under a law similar in many respects to the Wisconsin law; Georgia has thirty-one; Kentucky, thirty-nine; Mississippi, twenty-nine; Oregon, seven; and Ohio, forty-five, although the Ohio law differs from the Wisconsin law in that it provides for rural health departments as well as city health departments. The laws enabling the establishment of county health departments in these states are similar to the Wisconsin law in providing that in counties or districts adopting the law the full-time county or district health officer supersedes all part-time health officers in the county.

County health organizations are no longer an experiment. Their feasibility and value have been demonstrated in four hundred and sixty-seven counties or districts scattered over thirty-six states of the United States. Some of these departments have been in operation for more than ten years and in six states over 50% of the rural population are served by full-time county or district health organizations and in one state 79.48% of the rural population receive this service.

The rural population will not receive the full benefits of modern health service until granted the protection of organized full-time public health departments in keeping with accepted standards of efficiency.

Sincerely hoping we have answered your inquiry in a satisfactory manner, we remain

Very sincerely yours,
G. W. Henika, M. D.,
Assistant State Health Officer.

GWH:ES

COMPENSATION OF HEALTH OFFICERS

From a town clerk: "Is it necessary to pay our health officer both a salary and extra fees for placarding homes and removing the placards?"

"Will advise that the contract your board has made with your health officer will govern the method for paying him," replies the State Board of Health. "If your board of health has employed him at a nominal fee of five or ten dollars per year, as many town boards do, to cover the cost of postage and incidental expenses, and then pays him his regular fees for such additional work as may be done, that contract would, of course, govern your procedure. But if you pay him a flat salary to act as health officer, such amount should cover whatever expenses may be incurred.

"We do not encourage town boards to employ their health officers on a flat salary basis, for the reason that no one can estimate the amount of work that will be required in a town, and should an epidemic occur the health officer many times will have earned an amount equivalent to his total salary in the first two or three months of his incumbency in the office, and will be likely to feel, therefore, that any service rendered during the rest of the year will not be paid for. It is far better to make a contract with your health officer to pay him for the actual work done and establish a reasonable fee for such work, and to require the health officer to present to the board of health a monthly statement covering the previous month's work."

Eighteen people of Wisconsin have died during the last eight months as a result of carbon monoxide poisoning, the penalty for running an automobile engine in small closed garages, the state bureau of vital statistics reported. The coming of cold weather, with a great incentive for starting an automobile motor with the garage doors closed again increases the danger from this source.

* * *

Matrimony is decidedly more popular in eastern than in western Wisconsin with Burnett county having but 3.6 persons per thousand marrying in 1928 as against 17 per thousand in Milwaukee county in the same year. These two counties represent the extra high and extreme low in the state but figures compiled by the state board of health show that during the last five years a much smaller percentage of people married in western Wisconsin than in the eastern part of the state.

* * *

A new law enacted at the last legislative session will make highway building much more expensive for the state with a provision that in building a new road a driveway to the new highway must be provided into all the premises along the way. The law provides that where roads are lowered or raised provisions must be made for a driveway into property along the way with culverts if necessary. It also provides that where a highway cuts through a single premises a driveway must be provided off both sides of the roadway.

* * *

Wisconsin has lost 10,000 citizens through influenza since 1918, according to L. W. Hutchcroft, statistician of the state health department. He estimates that the state had 340,000 cases in the last outbreak.

Mr. Hutchcroft explained that only about 40,000 of the cases were reported. It was difficult to explain, he said, that while in 1918 only about five

per cent of influenza deaths were of persons above 50 years of age, in the latest epidemics the age shifted radically without about one-half of all such deaths in persons above 50 years.

* * *

The state conservation commission will get $298,797.62 for forestry purposes under the first mill taxes to be levied this year for such work with the sum definitely decided by the recent announcement of the state assessment. Wisconsin people adopted a constitutional amendment to permit the levy of four-tenths mill tax for forestry purposes and the last legislature was the first to make use of this new power. But the last legislature only levied a small part of the tax it was authorized to set, making it but one-twentieth of a mill.

* * *

With eight counties under quarantine the rabies situation has been growing worse in the last few weeks with the prospect that two more counties will be placed under the restrictions according to Dr. C. A. Deadman, state veterinarian.

* * *

The death rate is dropping in cities due to better health facilities but rural districts are less fortunate, Dr. W. P. Covington, Salt Lake City, representing the International Health Board, declared in a talk at a recent Health Conference at Madison. He advocated full-time county health departments to correct this. Dr. Covington declared that cities have better hospitalization and health department financing and that a similar service must be offered to the country districts. Dr. Covington said the average rural county of 30,000 population has an average of 360 deaths annually, of which 144 are preventable and has an average of 600 persons ill in bed all of the time. Much of this illness and fatality can be prevented, he declared.

* * *

"Accidents" and not disease stands first as the most common cause of deaths for people under 50 years of age. This startling announcement was made by the state board of health this week after a thorough study of all the causes of death during the past year. The automobile has become an agency to cheat disease and old age of many lives.

After fifty years of age, some disease becomes the most common cause of death, but through a life of 80 years "accidents" remain as one of the ten common causes that end people's existence on this earth.

During the first fifteen years of a person's life, "accidents" held first place as a death messenger. Between 15 years and 40 years tuberculosis was first with "accidents" second. Heart disease stood first as one of the most common causes for persons between 50 and 80 years; cancer was the second most common cause. The toll which "accidents" is taking is the most startling discovery made from a study of the death statistics.

Only five more Wisconsin counties, remain to be tested for bovine tuberculosis. Oconto and Calumet counties are now being tested. La Fayette, Iowa, and Green counties have signed up for, and now await, the test.

* * *

State and local taxes in Wisconsin increased more than $120,000,000 between 1901 and 1928, according to a bulletin issued by the state tax commission. The bulletin declares taxes in 1921 were $21,562,-186 and in 1928 were $148,916,106. Copies of the bulletin will be mailed free to persons interested. It contains full data on state taxes.

* * *

Male deputies of the state industrial commission have been instructed to tighten enforcement of the one day rest in seven law. Some time ago the commission, after conferences with the industrial leaders, set up rules for observing the weekly rest day in the paper and pulp mills. Aside from the enforcement, the deputies and factory inspectors have not paid a great deal of attention to the matter of the industries giving each worker a day's rest. The commission has now decided that the deputies will go through the plants and records of each industry with alert eyes for men working seven days a week.

* * *

Further construction of the children's code as to offenders under and over 16 years of age has been rendered by the attorney general. The attorney general holds that the law does not in any way prevent police from arresting children for the commission of crimes. It simply provides that after the arrest the cases of children under 16 years of age must be taken care of by a juvenile court while the cases of minors over 16 can either be prosecuted in the usual way before the criminal courts or taken before the juvenile court as the prosecuting officers think wise.

* * *

The opinion also holds an attorney general need not prepare the petition of cases of children under 16 years of age in the juvenile court or appear in the cases unless requested to appear by the judge.

* * *

During the coming year, upwards of $18,000,000 will be collected in state income taxes, according to the report of the state tax commission filed today with Secretary of State Theodore Dammann and Budget Director J. B. Borden.

The first year the tax law was in effect, in 1912, these collections amounted to $1,631,413. Under the law, the locality where the tax originates receives fifty per cent and the county ten per cent of the collection. The state's share is 40 per cent.

* * *

In the case of Rose Buske of Fond du Lac, the Supreme court holds that under a health indemnity policy agreeing to pay for illness of a person confined within the house, one adjudged insane and confined at the Northern hospital can not recover.

Confinement within the house is construed to result from physical disability, confinement within the hospital from mental disability. The particular policy does not indemnify insane persons.

* * *

Health officers in Wisconsin cities receive salaries ranging from $7,500 to $10 per year, and in nine cities health officers get fees which vary with the work done, show figures compiled by the municipal information bureau of the University Extension division.

The $7,500 salary is paid by Milwaukee, Madison's health officer receives the second largest amount of $5,000. Kenosha pays $4,200 and West Allis, $4,000. All other cities pay less than $4,000.

* * *

Physicians throughout Wisconsin during the past year borrowed by mail 6,771 medical books, pamphlets, journals, and absracts from the state university medical library extension service, Madison, according to a report just issued by Miss Frances B. van Zandt, librarian. This material was sent out in response to 4,150 requests, and was approximately three times the amount loaned in 1927–1928, the first year the service was in operation.

Medical library loans are part of the cooperative program maintained by the university extension division and medical school with the state medical society and physicians of the state. Other features of the program are postgraduate lecture-clinic courses in various cities and lectures at meetings of county medical societies.

* * *

Harry L. Butler, Madison lawyer and former member of the University of Wisconsin board of regents has been appointed by Gov. Kohler to complete the unexpired term of the late Regent M. B. Olbrich, Madison.

* * *

Rigid enforcement of the statutes prohibiting the continuance of display for sale or the return to the bakeries of stale bread or other bakery products is being demanded by the marketing division of the new farm board. Prosecutions will follow if violations of the laws are discovered, it is said.

Recent investigation in Milwaukee has convinced the board that the laws in regard to stale bread and other bakery products were not being observed by some concerns in that city.

Trends and Opportunities in Medical Practice*

By OLIN WEST, M. D.,
Secretary, American Medical Association,
Chicago

Mr. President and members of the State Medical Society of Wisconsin: I bring you greetings from the headquarters organization of the American Medical Association and assurances of the good wishes of that organization and of its very sincere appreciation of the contributions that the State Medical Society of Wisconsin has made for the benefit of organized medicine, not only through the services of its individual representatives or official bodies, but also as one of the safe, sane, solid and nevertheless progressive units of medical organization in the United States.

I have learned a good deal about the State Medical Society of Wisconsin since I have been here this time. It is the only medical society I have had the privilege of attending that seems to have endless sessions. It was my pleasure last night to get into a meeting of the House of Delegates. That meeting was adjourned to the coffee room of the Loraine Hotel and prolonged there for some time, and at three o'clock this morning I was awakened by a peripatetic session of a part of the Society on the sidewalk. The first thing I saw when I looked out of my window at the hotel this morning was a long string of golf bags carefully arranged along the curb, showing that things were to be kept moving.

I hope of all of the sessions have been profitable. Perhaps the most interesting one to which I had the pleasure of listening was the one on the sidewalk last night where the participants in the meeting spoke right out. You could hear them anywhere from a block to a mile away, which leads me to mention one of the trends, unfortunate, it seems to me, which is to be noted at scientific meetings of medical men—an apparent determination of many of those who participate in scientific discussions to keep the subject matter of their remarks deep and dark secrets. I do not suppose anybody here would accuse George Crownhart of being a shrinking violet, but of all that he has said this morning I was able to hear only one word.

* Address before 88th Anniversary Meeting, State Medical Society of Wisconsin, Madison, September, 1929.

I heard my friend, Dr. Beebe, back there utter something which apparently was very entertaining to those around him, but all I got out of it was that he either won twenty-nine dollars and lost thirty-one, or that he lost twenty-nine and won thirty-one.

It would contribute a great deal, it seems to me, to the success of scientific meetings if doctors would learn to talk to their audiences instead of talking to their vests or to the floors. A constant stream of letters come to my desk after meetings of medical societies, from men who have attended with the desire to learn, complaining bitterly that they are not able to hear what is said from the floor. The value of this meeting or of any other scientific meeting will be greatly enhanced if those who have something to contribute will speak so they can be heard.

As I see the situation, there are few definite trends in medicine that are new. We are inclined, it seems to me, to consider noise as constituting a trend in medicine. There are instances in which individuals or groups have certain pet theories that they advertise loudly, so loudly that some of us come to believe that they represent definite trends in medicine. Propaganda is floated by interested individuals with such effect that the impression is created in the mind of the public many times, and not infrequently in the minds of the profession itself, that it represents a trend in medicine. There are even specific movements started in the profession or outside that, when analyzed, appear to be in the nature of privilege sought by their agitators and promoters, and these are sometimes mistaken for definite trends.

But with it all the medical profession is pursuing in a very faithful and persistent manner its age-long desire and purpose to perfect the science of medicine and to extend the benefits of medical service to all the world.

There are, however, certain new trends which deserve the most careful thought and consideration of the entire profession. One of the most important of these, and to my mind one of the most dangerous, is the tendency upon the part of corporations of one kind or another to do away with the time-honored method of delivery of medical service to those in need of it and to put medicine on a machine basis, thereby effacing the humane and vitally important relations that should be maintained between the physician and his patient.

CORPORATE PRACTICE

Corporation practice organized for the purposes of profit, in many instances, and organized in other instances with a view of giving what the promoters seem to believe is the best possible service to employes and the families of employes of large industrial concerns has come to be of such importance as to merit our most thoughtful attention.

There are a number of corporations in the various parts of the United States frankly organized for the purpose of making money out of the practice of medicine. They propose to furnish medical service through paid agents at a certain price, always below the real cost of adequate scientific service. In my opinion, this situation is one that is fraught with immeasurable danger, much more danger to the public than to the medical profession, if the profession will simply keep its feet on the ground and its head up, and fight for the maintenance of that kind of medical service to which human beings are by every right entitled.

There has recently been organized in the city of Chicago, for instance, a so-called medical service by a lay group which advertises that it has in its employ from two to four hundred reputable physicians. My observation has been that the medical profession of the city of Chicago is rendering good service to the whole public, all the way from the man who lives in the district which is known as "back of the yards" up to the man having the most pretentious offices in the skyscrapers of the Loop. I am inclined to believe that this service has been rendered, generally speaking, at a very reasonable cost to the public. Why has it, in the minds of these laymen, become necessary that they should organize some sort of a scheme for providing medical service to the people? In so far as I can find out, there is no necessity for it except as it may exist in the minds of the organizers, suggested by their desire to

make money out of the exploitation of the medical profession.

Of course, many of you know of another organization in Chicago, in operation for years, which, I am told, has a net profit at the end of each year of from $100,000 to $200,000, pretending to render medical service in a certain field at prices below what the people would have to pay to private physicians. I am very doubtful that the costs of the services of this particular institution are at all smaller than the cost of even better service would be if rendered by private physicians to individual patients.

The great danger in these movements, it seems to me, is not to the medical profession but to the public. I am convinced that it is not possible to furnish the best medical service on the basis of machine methods, and that anything which tends to destroy the intimate human relation which should exist between the physician and his individual patient tends to destroy the value of medical service rendered.

"HOSPITAL ASSOCIATIONS"

There are certain groups in the medical profession itself, a small element, I think, that seem to be inclined to organize similar schemes. We have, for instance, so-called hospital associations; we have certain groups that designate themselves as clinics, not at all of the nature of the clinics operated by reputable men who are actuated by the highest scientific motives and the most worthy motives from all standpoints. These groups have seized upon the name clinic because they believe it is a name that will give them prestige and enable them to make more money.

I heard the other day from a very prominent physician that one of these hospital associations in his state, organized by one or two physicians, has succeeded in accumulating more than one million dollars within a few years, by offering to the public memberships in the so-called association which entitles their holders to medical, surgical, and hospital service for one dollar each month, for each individual member.

I asked, "How in the world have they been able to accumulate one million dollars on that sort of charge?"

My informant replied, "The charge does not mean anything. A man becomes ill, applies to the hospital and says 'Here, I have paid my dollar. I want the medical, the surgical and the hospital service to which I am entitled.' "

"All right, you can have it. We will put you over in the ward and will give you the service we have contracted to render, but that is not what you ought to have. You have appendicitis and a very dangerous case of appendicitis, and it won't do for you to go into the ward. You must have a special room and must have a special nurse and a particular kind of operation." They tell him it will cost him $150 for an operation, and all the rest of the costs paid to any private institution by a private patient, and perhaps more.

Now that is a dangerous scheme. That is an attack on the very integrity of the medical profession, and constitutes a very serious menace to the welfare of the general public.

There *is* a definite trend, which ought to be combated as effectively as possible by the medical profession, for lay corporations to take up the practice of medicine and to pursue the practice of medicine by providing medical service through hired professional henchmen. That question, I understand, is going to be discussed by another on your program later on in the session. I mention it only because I believe it is important enough for every member of this society, even though this sort of thing has not developed in your own state, to give it his most careful consideration and do whatever he can do in the public interest to combat this tendency.

There is a tendency, I am sorry to say, on the part of a minor element of the profession to commercialize the practice of medicine. I say a tendency on the part of a minor element of the profession, because I believe that the medical profession as a whole has no desire whatever to commercialize or to prostitute the practice of medicine. The truly representative medical profession of the United States is just as loyal to the traditions that must be upheld in order to maintain the standing and dignity of the profession as it has ever been. But the minor element exhibiting this tendency has made so

much fuss that they have succeeded in creating in the minds of the public the impression that the whole medical profession is being speedily commercialized. It is an unfortunate situation. I do not know just how it can be combatted successfully, but it is a condition that demands our most serious consideration and demands that organized medicine shall make known to the world that the representative medical profession of this country is actuated by the same motives—the very highest motives—that have always actuated true physicians.

There is a tendency, not a trend in medicine, but a tendency on the part of another minor element, perhaps the same element of the medical profession, to destroy medical ethics. This minor group is constantly raising a cry to the effect that medical ethics is moss-covered, that it has served its purpose, that it ought to be abolished.

My conviction is that in the principles of medical ethics which have guided the profession for these many, many years there is to be found the strongest safeguard that can be had for the public interest, and the strongest safeguard that can be established for the interests of the profession itself as a scientific profession. If these few insistent voices should gain the ascendency in their contention the medical profession would soon be prostituted to the status of a trade, and the progress of scientific medicine would be, for the time at least, absolutely retarded. A profession cannot remain a profession without ideals and without traditions, or without ethics.

OVER-HOSPITALIZATION

There are certain other tendencies in the profession itself which may be undesirable. I wonder sometimes if there has not been too great a tendency toward over-hospitalization of patients. I had a conversation the other night with a layman who told me his physician insisted that whenever any member of his family got sick, from any cause whatsoever, before he was called the sick member of the family must go to the hospital. He related to me the incidents that occurred in the family which sent various members of the family to the hospital, ranging all the way from a stubbed toe of his six-year-old boy up to a brain abscess. I imagine it was all right to hospitalize the brain abscess. I do not believe it was right to hospitalize the stubbed toe. I do not know how far that tendency has gone, but I have personal knowledge of just such situations as that to which I have referred. The disappearance of the family physician has been loudly lamented in various places and by various persons. The family physician exercises a tremendously strong hold upon those members of the public with whom he comes in contact, if he does as much of his practice as can be done in the home, and he loses a very peculiar part of his intimate relation with people as a family physician if he sends everything to a hospital. It is worth thinking about.

NURSES' TRAINING

We are reaping the results of a very definite tendency which developed some years ago, whereby nurses were over-trained, at the instigation of the medical profession itself. We have, I believe, almost succeeded in making doctors out of most nurses. We have almost succeeded in making most nurses believe there is no service for them except in a hospital, and that they ought not be called upon to do anything except in the capacity of an individual nurse to an individual case. We have almost succeeded in making nurses believe that they need a very profound knowledge of pathology and physiology and other branches of medical learning, until they have almost gained the ascendency over us in many particulars and we and the public are in a bad fix.

I do not know how far the training of nurses ought to go, but it does appear that there ought to be a definite policy adopted, prosecuted, and maintained with respect to the training of nurses and the services of nurses to the public, so that the public may secure necessary and adequate nursing service, and so that, at the same time, the nurse who does her duty and does it well should receive adequate compensation. It is a complex problem, a very complex problem, and it is not going to be settled by railing at the nurses. The nurse is entitled to compensa-

tion that will enable her to live in comfort, but the public is entitled to good nursing service when and where needed. It seems to me that it is up to the medical profession, in cooperation with whatever agencies may be necessary, to study this particular situation and to keep on studying it and to keep on working at it until a solution is found.

I have made some passing remarks about the family physician. The family physician has not disappeared by any means. He is still extant, and I think he will always be, but I believe a great many physicians, by their own actions and of their own free will have removed themselves from the status of family physician. There are certain obigations that rest on the family physician, which he has a perfect right to exercise and which ought to be fully exercised in the complete discharge of his duty.

THE FAMILY PHYSICIAN

It is a part of the duty of the family physician, when he has served long enough to feel assured that he *is* the family physician, to protect the health of the family he serves and to utilize for the benefit of its every member those measures that he believes to be efficacious. If a baby boy is born, he should give notice that at the proper time the child will be circumcised and should see to it that it is done. If communicable disease is prevalent in the community he should, on his own motion, apply protective measures. He should vaccinate the baby and revaccinate the children and older members of the family. He should maintain the sympathetic and interested attitude *in the home* that means so much in the successful practice of medicine and should be quickly responsive to every reasonable demand that is made on him. He should exercise the authority that is rightfully his because of his scientific knowledge and because of the responsibility that rests on him. I know that this plan will work because I myself have worked it, and I know that the people want it. Some of us have gotten away from family practice because we have gotten away from the homes and have substituted the hospital for the home.

My topic, as I recall it, is "Trends and Opportunities in Medical Practice." There is one important opportunity that the medical profession has, especially in its ordinary capacity, of which I think full advantage should be taken and of which, I think, if full advantage is taken, it will lead to vast public benefit. You know we have all over this country, beginning with the federal government itself, in all of the states and many of the cities, organized health departments. These agencies are legalized. They are provided for in the laws of the states. They are going to be maintained. They ought to be maintained.

PRESERVATION OF PUBLIC HEALTH

There are certain duties with respect to the preservation of public health and the benefit of the general welfare that cannot be performed except through the agency of established departments of health. There is a certain element of the medical profession inclined to withhold its cooperation with departments of health. There are reasons for this and some of them not in any manner due to faults of the medical profession, but originated in certain official actions taken by the Departments of Health themselves. The organized medical profession has a splendid opportunity for a wonderful service if it gives to health departments the benefit of its counsel and guidance and active, constructive help. There is a leadership that very naturally devolves upon the medical profession, which it ought to assume with respect to this matter of public health. But it is not always easy to say just how it should and can assume that leadership. It is a problem, however, that ought to receive the immediate and persistent consideration of every unit of organized medicine in the United States.

It is unfortunate that some health officers are in such a big hurry to turn the world over that they have adopted and put into practice certain procedures that the medical profession does not believe are really for the best interests of the public, because the medical profession, in its capacity as practicing physicians, knows that a good many things which appear on the surface to be extremely beneficial are, in the long run, not beneficial

but harmful. Health officers in some instances have acted with poor judgment and without the fundamental knowledge of all the facts involved, but that fact does not destroy the possibility for the development of helpful leadership in all public health problems by the organized medical profession.

I am inclined to doubt that we have given this matter the careful, constructive consideration it needs. The American Medical Association has called three annual conferences on public health, attended by health officers and by practicing physicians. It has been disheartening and yet it has been encouraging to hear the discussions at these conferences. There has been "crimination and recrimination", but there has also been much of helpful suggestion and there is reason to hope that some constructive plan that may be organized whereby the medical profession may maintain leadership in all the public health activities and may be properly represented in administrative offices of health departments, to the immense benefit and happiness of the people of this country.

Public health is one of the fields of medicine and the guidance of public health work a part of the practice of medicine. It would be unfortunate, indeed, in my judgment, if the administration of public health activities were turned over to any except trained physicians. The organized medical profession should be able to bring help toward the successful solution of some rather irksome problems in this field. I am sure that health officers, as a body, want and will accept the support and guidance of the profession offered in the spirit of helpfulness and progress.

LAY ORGANIZATIONS

Scientific medicine, in my judgment, cannot be replaced by anything in the world. Many of these schemes which laymen are proposing and organizing cannot be operated except with the assistance of physicians. I am told that one of the great princes of industry is right now considering the question as to whether he shall give an immense amount of money to the organization of a thoroughly unscientific theory of the nature of disease and its treatment. That man has built a magnificent hospital in one of the principal cities of this country. He is a man who has achieved the most distinguished success as a manufacturer and is looked upon by many of our citizens as one of the greatest men that the country ever produced. But I am told that he is giving consideration right now to the question of whether he shall donate some hundreds of thousands of dollars to a faddist to establish hospitals and clinics to be used by this fellow to promulgate his silly theories and, designedly or not, to prey upon the public.

Another one of the great princes of industry in the United States has donated a very considerable sum to be used, I am told, to provide medical service for the man in ordinary circumstances. There is no way we can stop this gentleman from doing that. He has every right under the law, if he wants to do it, to give twenty-five million dollars or one hundred million dollars or a billion, if he has it, for the establishment of funds from which he can pay anybody's doctor bill that he wants to pay.

We cannot stop him, but I doubt very seriously that any physician ought to give his aid and support to any such movement. I may be wrong, but I entertain that doubt, because I believe the effect of any arrangement such as that is going to be for the detriment rather than for the benefit of the public, because it will inevitably tend to destroy the independence and the very manhood of those who accept its dole.

The same gentleman insists the cost of medical service is too high; that the cost of hospital service is too high; that the ordinary man cannot pay these costs. Insofar as I am able to ascertain, it has always been difficult for the man who has been the victim of "hard luck" to pay for medical service. I cannot remember when there was not somebody who could not pay for medical service like others could pay. It has always been difficult for the unfortunate and for the wastrel to pay and, hard as it may sound to say it, it might be a very bad thing for society if it were otherwise.

The whole tendency of government, the tendency everywhere, is to make things too

easy for the individual. Anything that destroys a man's rightful independence is detrimental to him and to society. A man can be independent even though he is poor. He can be honest even though he is poor and he can maintain just as high a quality of independence and honesty by paying what he can as the millionaire can maintain, though he pays from his wealth a premium for all that he gets.

Any scheme that will result in teaching the people that they are entitled to something for nothing, or that will lead to the pauperization of any considerable part of the social element will be detrimental to the public interest.

We must consider what part we are going to play in these schemes. Are we going into them and blindly help them along? Or shall we withhold our support until we feel that they are right and then go ahead and help wholeheartedly? Or are we going to study them until we are convinced they are wrong and then try to combat them in every honorable way? Not in our own interest but in the public interest, these matters must be studied, these problems must be solved and our parts must be played in keeping with our convictions.

COST OF MEDICAL CARE

There has been established a committee on the cost of medical care. The idea of establishing that committee originated in the mind of a layman and the original group, I understand, did not include any practicing physician. This committee announced its determination to discover what was the matter with the cost of medical care, and began to tell the world what was the matter before they discovered anything. The committee, as now constituted, is composed of a relatively large number of physicians and an equal number of laymen. It is attempting to develop the facts with regard to the cost of medical care.

One of the speakers this morning referred to the installment plan of buying. You may not have thought about it, but that plays an important part in the cost of medical service. The janitor of my building has a finer piano, a more costly radio, a better automobile, a prettier oriental rug than I can afford. His wife has a curling iron and a vacuum sweeper and I know not what else. All these luxuries—for most of them are luxuries—were bought on the installment plan. If this janitor's wife and children should get sick or have to go to the hospital for operations the attending physician would have to forego his fee or wait a long time for a part of what would ordinarily be a fair charge for his services.

Well, now, that means a lot. These gentlemen who are promoting all these wonderfully fine schemes for relieving the poor man's burden of the cost of medical care, in so far as I know, have never asked a prospective purchaser, when he went in to buy, whether he had any sickness in his family, and never reduced by one cent the price of a wash tub, or a pair of shoes, or a sack of flour because the buyer had been the victim of hard luck.

Go to the banker, unless you are better off in this world's goods than I am, and try to borrow some money and find out what you can do. You will have to pay higher interest than the richer man and give more or better collateral than he, and the banker will not ask you one question as to whether or not you have had sickness in your family.

Who could have told a few years ago that the tremendous changes that have come about in the industrial and commercial world were going to take place? Who could have known ten years ago that mass production was going to be the accepted policy of industry in the United States? Who would have known that high pressure salesmanship, whereby the last farthing of the ordinary man is tied up through the installment plan of buying and selling, was going to take tremendous hold it has taken on the life of this country?

Now I am afraid that our studies of the cost of medical care, as an isolated problem, are not going to result in any very great benefits, unless the whole economic situation is studied and answers are found to many broader questions. The cost of medical care is a mere fly speck on the economic map.

We are trying to develop the facts in the studies that are being made by the American

Medical Association, as its own enterprise, with respect to the incomes of physicians in the United States. We are also trying to ascertain the facts, as far as they can be ascertained, as to what investment the physician is required to make in fitting himself for the practice of medicine and maintaining himself as a practicing physician. The results of these studies will be made available to the committee. These are important considerations, because if for no other reason than there has been a tremendous amount of loose talk about the income of the physician. It is stated all the way, according to the point of view, from nothing at all up to hundreds of thousands of dollars. So far as our investigations have gone, both points of view are entirely wrong. We are not ready to make any pronouncement about it one way or the other, but there are physicians in the United States who actually practice medicine at a loss. There are a few individual physicians in the United States who, by their own statements, are receiving large incomes through their efforts as practitioners of medicine. But the average man, in so far as I am able to find out, is making a living and in most instances is able to keep his family in reasonable comfort, but is not able to lay up very much to insure against the discomforts and hardships that the years to come may bring.

I do not know what the facts are going to be when they are developed, but I think it would be worth while for the facts to be established as clearly as they can in order that the truth may be known. It may have a very helpful influence on some of the philanthropic millionaires who seem to think all doctors are rich, and on some others who seem to think all doctors are paupers to know the truth. I think that when the facts are developed they will show that physicians generally are far more poorly compensated than are the members of many other groups in our social structure whose usefulness is not nearly so large.

RESPONSIBILITY OF PROFESSION

It is a great privilege to be an honorable member of the medical profession. Privilege entails responsibility, and, as I see it, the greatest responsibility that rests upon the medical profession today is that it shall "deliver the goods" in the practice of medicine. That is a very simple formula. I am proud to say that I believe the medical profession as a whole is delivering the goods in that the American public is getting better medical service today than it ever got before. And I believe the medical profession today is as highly respected and honored by the public as it ever was. I take no stock in the whining to the effect that the medical profession has lost its standing and influence and prestige and all that sort of stuff. I do not believe it for a minute. I do believe there are certain tendencies on the part of a few individuals in the medical profession that reflect, unfortunately and undeservedly, on the profession as a whole. But that is true of any group under God's sun, and I do not think we can stop it except by precept and example and by determined effort to keep our standards high and to fight to the death every degrading influence.

The great responsibility and opportunity of organized medicine, as I see it, is to do everything it can do to promote the art and science of medicine and to make its every member a better physician, capable of rendering better service to humanity.

Another great responsibility that rests upon the medical profession is to see to it that the ideals and traditions of medicine are fully maintained. I do not mean that we shall be bound by traditions that have no force at the present time, but that we should uphold the honorable traditions upon which the very practice of medicine was founded in the beginning and on which it must always rest if the cause of humanity is to be best served. Whenever you get away from our ideals and time honored traditions, we are no longer a profession, but a trade—a business. To make the practice of medicine a business means to destroy scientific medicine and to jeopardize the public welfare and to retard the development of mankind toward the highest planes of human efficiency and culture.

It is at once our privilege and our duty to fight for the maintenance of the ideals and traditions of our profession, described by that revered poet, publicist and physician, Oliver

Wendell Holmes, as "the profession which for more than two thousand years has devoted itself to the pursuit of the best earthly interest of mankind, always assailed from without by such as are ignorant of its infinite perplexities and labors, waging an unequal contest with the hundred-armed monster that walks at noon and sleeps not at night, but toils on, nevertheless, not for itself or for the present moment, but for the race and the future."

The State Medical Society of Wisconsin, I know, is going to maintain the richest traditions of the medical profession as it always has done and combat the evil tendencies on the part of those who would prostitute our profession and those who would use it in this, that, or the other scheme for the purposes of private gain; and resist those movements that may be conceived with high purpose but that, with our knowledge of our art, we conscientiously believe will unfavorably react upon the public interest by retarding the development of scientific medicine and limiting its widest and best application to the needs of mankind.

Officers—Committees, State Medical Society

Elected by House of Delegates: President, president-elect, vice-speaker and councilors. Elected by Council: Secretary and Treasurer. Appointed by president-elect: One member on each standing committee to serve a three-year term.

President:
F. J. Gaenslen, Milwaukee____Sept., 1930
President-Elect:
A. J. McDowell, Soldiers Grove_Sept., 1930
Secretary:
J. G. Crownhart, Madison_____Jan., 1930
Treasurer:
Rock Sleyster, Wauwatosa____Jan., 1930
Speaker:
S. J. Seeger, Milwaukee _____Sept., 1930
Vice-Speaker:
C. A. Harper, Madison_____Sept., 1930

Delegates to American Medical Association:
Joseph F. Smith, Wausau_____Sept., 1931
J. Gurney Taylor, Milwaukee ___Sept., 1930
W. E. Bannen, La Crosse _____Sept., 1930

Alternate delegates:
F. Gregory Connell, Oshkosh ____Sept., 1930
T. W. Nuzum, Janesville _____Sept., 1930
M. D. Bird, Marinette _____Sept., 1931

COUNCILORS

First: Dodge, Jefferson and Waukesha County Societies. A. W. Rogers, Oconomowoc, 1930.

Second: Kenosha, Racine and Walworth County Societies. F. W. Pope, Racine, 1930.

Third: Dane, Columbia, Green, Rock and Sauk County Societies. C. A. Harper, Madison, 1931.

Fourth: Crawford, Grant, Iowa, LaFayette and Richmond County Societies. Wilson Cunningham, Platteville, 1931.

Fifth: Calumet, Manitowoc, Washington–Ozaukee and Sheboygan County Societies. A. H. Heidner, West Bend, 1931.

Sixth: Brown–Kewaunee, Door, Outagamie, Fond du Lac and Winnebago County Societies. F. Gregory Connell, Oshkosh, 1931.

Seventh: Juneau, La Crosse, Monroe, Trempealeau–Jackson–Buffalo and Vernon County Societies. S. D. Beebe, Sparta, 1932.

Eighth: Marinette–Florence, Oconto and Shawano County Societies. T. J. Redelings, Marinette, 1932.

Ninth: Clark, Green Lake–Waushara–Adams, Lincoln, Marathon, Portage, Waupaca and Wood County Societies. Joseph F. Smith, Wausau, 1932.

Tenth: Barron – Polk – Washburn–Sawyer–Burnett, Chippewa, Eau Claire and Associated Counties and Pierce–St. Croix County Societies. H. M. Stang, Eau Claire, 1932.

Eleventh: Ashland–Bayfield–Iron, Douglas, Langlade, Oneida–Forest–Vilas and Price–Taylor County Societies. J. M. Dodd, Ashland, 1930.

Twelfth: Milwaukee County Society. R. W. Blumenthal, Milwaukee, 1930.

COMMITTEES

1. The Committee on Scientific Work:
   Stanley J. Seeger, Milwaukee, 1930
   W. G. Sexton, Marshfield, 1931
   W. S. Middleton, Madison, Chm., 1932
2. The Committee on Public Policy:
   Otho Fiedler, Sheboygan, Chm., 1930

Carl Harper, Madison, 1931
S. M. B. Smith, Wausau, 1932

3. Editorial Board:
   Oscar Lotz, Milwaukee, Chm., 1930
   Hoyt E. Dearholt, Milwaukee, 1931
   Joseph F. Smith, Wausau, 1932
4. The Committee on Medical Defense:
   A. J. Patek, Milwaukee, Chm., 1930
   F. Gregory Connell, Oshkosh, 1931
   W. C. Becker, Watertown, 1932
5. The Committee on Medical Education and Hospitals:
   C. R. Bardeen, Madison, 1930
   Joseph W. Lambert, Antigo, 1931
   F. D. Murphy, Milwaukee, Chm., 1932
6. The Committee on Medical Economics:
   J. F. Wilkinson, Oconomowoc, 1930
   V. F. Marshall, Appleton, 1931
   T. D. Smith, Neenah, Chm., 1932
7. The Committee on Health and Public Instruction:
   W. D. Stovall, Madison, 1930
   H. M. Stang, Eau Claire, 1931
   C. M. Gleason, Manitowoc, Chm., 1932
8. The Committee on Necrology:
   Councilors and Secretary
9. Advisory Committee on Medical Extension:
   R. L. MacCornack, Whitehall
   K. H. Doege, Jr., Marshfield
   M. D. Bird, Marinette
   Otho Fiedler, Sheboygan
   J. F. Wilkinson, Oconomowoc

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Katz, H. M.

Cedar Grove:
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Voskuil, A.

Centuria:
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Beier, A. L.
Ellenson, E. P.
Field, Merton
Hatleberg, C. N. B.
Henske, W. C.
Hurd, H. H.
Kelly, J. A.
McCarty, E. O.
McHugh, F. T.
McRae, J. D.
Schwartz, R.
Somers, A. J.
Williams, S. E.
Wiltrout, I. D.

Clear Lake:
Campbell, L. A.
Nelson, A. N.

Cleveland:
Reinert, E. N.

Clinton:
Dodge, C. H.
Parker, A. S.
Thomas, W. O.

Clintonville:
Finney, W. H.
Miller, E. A.
Walch, F. C.

Cobb:
Morton, H. H.

Colby:
Christofferson, H. H.
Schemmer, A. L.

Coleman:
Graner, L. H.

Colfax:
Cooper, C. A.

Columbus:
Bellack, B. F.
Caldwell, H. M.
Mudroch, J. A.
Poser, E. M.
Schmeling, A. F.

Coon Valley:
Solberg, A. A.

Cornell:
Foster, J. H. A.

Crandon:
Decker, C. O.
Ison, G. W.

Cross Plains:
Froggatt, W. E. L.

Cuba City:
Bair, F. M.
Terry, R. E.

Cudahy:
Crigler, R. R.
Krueger, B.
Partridge, C. D.
Sidler, A. C.
Smith, H. S.

Cumberland:
Babcock, I. G.
Grinde, G. A.
Lund, S. O.
Thorsness, E. T.

Dale:
Archer, W. E.

Danbury:
Maas, David A.

Darien:
O'Brien, H. N.

Darlington:
Orton, Susanne
Peck, W. W.
Quinn, R. B.

De Forest:
Bertrand, J. H.

Delafield:
Barnes, H. T.

Delavan:
Crowe, N. F.
Doughty, J. W.
Jacobson, T. L.
Rice, C. W.
Rice, F. A.
Wright, C. A.

Denmark:
Vosburgh, W. H.

De Pere:
Goggins, G. F.
Kersten, N. M.
Lenfestey, J. P.

DeSoto:
Andrew, G. F.
Myrick, A. L.

Dodgeville:
Hagerup, T. A.
Hamilton, D. B.
Pearce, W. J.
Reese, William
Walker, H. M.

Dorchester:
Foley, F. P.

Dousman:
Schneider, Hans

Durand:
Harper, G. C.
Schulberg, P. A.

Eagle:
Fitzgerald, J. J.

Eagle River
Oldfield, R. A. A.

East Troy:
Meany, S. G.
Mullen, R. A.
O'Leary, T. J.

Eau Claire:
Anderson, F. G.
Baird, J. C.
Beebe, G. W.
Cook, F. S.
Curtis, G. E.
Derge, H. F.
Falstad, C. H.
Flynn, L. H.
Goddard, J. B.
Guyton, E. A.
Haag, A. F.
Hayes, E. P.
Hayes, E. S.
Hoyme, G.
Johnson, Fred
Kinsman, F. C.
LaBreck, F. A.
Malone, J. Y.
Mason, E. L.
Midelfart, H. C. U.
Mitchell, R. E.
Payne, A. L.
Scullard, G.
Seeman, W. O.
Spelbring, P. G.
Stang, H. M.
Stoland, I.
Tupper, E. E.
Werner, Nels
Werner, R. F.
Ziegler, J. E. B.

Eden:
Hardgrove, J. H.

Edgar:
Banfield, S. R.

Edgerton:
Cleary, B. L.
Shearer, A. T.
Shearer, F. E.
Shearer, H. A.
Sumner, W. C.

Egg Harbor:
Eames, H. F.

Elcho:
Dailey, P. J.

Elderon:
Phelps, E. J.

Eldorado:
Jackson, F. A.

Eleva:
Alley, H. C.

Elkhorn:
Marsh, J. M.
Ridgway, E. T.
Sorenson, E. D.

Ellsworth:
Cannon, C. R.
Munger, D. C.
Nylander, E. G.

Elmwood:
Breed, A. L.

Elroy:
Vogel, C. A.
Vogel, C. C.

Ettrick:
Rogne, C. O.

Evansville:
Guilfoyle, J. P.
Helgesen, E. J.
Smith, C. M., Jr.
Trentzsch, M. W.

Excelsior:
O'Hora, C. M.

Fairwater:
Buckland, R. H.

Fall Creek:
Austin, W. T.

Fall River:
Hunt, F. O.

Fennimore:
Bailey, M. A.
Howell, E. C.
Marsden, T. H.

Fond du Lac:
Alexander, W. S.
Borsack, K. K.
Boyd, G. T.
Dana, A. C.
Devine, H. A.
Devine, J. C.
Fisher, R. S.
Florin, A. C.
Folsom, W. H.
Gardner, L.
Gavin, S. E.
Helz, J. W.
Kosanke, F. E.
Layton, O. M.
Leonard, C. W.
Longley, J. R.
McCabe, P. G.
Meiklejohn, D. V.
Rehorst, J. J.
Sharpe, H. R.
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Simon, L. J.
Smith, E. V.
Twohig, D. J.
Twohig, H. E.
Twohig, J. E.
Waldschmidt, J.
Waldschmidt, W. J.
Walters, D. N.
Wiley, F. S.
Yockey, J. C.

Footville:
Harvey, J. R.

Forest Jct.:
Wollersheim, P. J.

Forestville:
Hirschboeck, J. G.

Ft. Atkinson:
Bennett, L. J.
Majerus, P. J.
Franzel, J. E.
Caswell, H. O.
Chase, E. S.
Morris, R. C.
Venning, J. R.
Young, Will

Fountain City:
Reinhardt, J. P.

Fox Lake:
Elliott, E. S.

Frederic:
Andrews, W. C.
Arveson, R. G.
Diamond, J. A.
Swanson, A. J.

Friendship:
Oliver, L. H.
Treadwell, G. F.

Galesville:
Alvarez, R. L.
Christiansen, G.
Jegi, H. A.

Genoa City:
Bill, B. J.

Gillett:
Baldwin, L. H.
Berg, W. R.

Gilmanton:
Smith, A. D.

Glenbeulah:
Hansen, John

Glenwood City:
McCusker, C. F.
McMahon, A. E.

Grafton:
Balkwill, C. A.

Granton:
Rath, R. R.
Wink, R. H.

Grantsburg:
Lindberg, C. O.

Green Bay:
Atkinson, H. S.
Bartran, W. H.
Buchanan, R. C.
Carter, R. M.
Charbonneau, A.
Chloupek, C. J.
Clifford, P. M.
Colignon, J. C.
Comee, William
Cowles, R. L.
Crikelair, F. L.
DeCock, J. L.
DelMarcelle, C. C.
Fairfield, W. E.
Fuller, M. H.
Hendrickson, H.
Jordon, E. M.
Kelly, W. W.
Kispert, R. W.
Knox, E. S.
Leaper, W. E.
Levitas, I. E.
McCarey, A. J.
McNevins, E. S.
Minahan, J. R.
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Mueller, W. E.
Nadeau, E. G.
Oliver, T. J.
Olmsted, A. O.
Quigley, L. D.
Rhode, H. P.
Robb, J. J.
Rose, Felix
Saunders, O. W.
Schmidt, E. S.
Senn, George
Stiennon, O. A.
Tippet, W. P.
Troup, R. L.
Williamson, C. S.
Wolter, H. A.

Green Lake:
Baldwin, G. E.

Greenleaf:
Titel, E. A.

Greenwood:
Boeckmann, F. A.
Schultz, H. A.

Hales Corners:
Johnson, A. W.
Pierce, D. F.

Hartford:
Hoffmann, J. G.
Lehmann, F. W.
Loughlin, T. F.
Sachse, F. W.

Hartland:
Nixon, H. G. B.
Overbaugh, J. H.

Hawkins:
Baker, J. C.
Christensen, O. A.

Hayward:
Ballard, J. A.
Larsen, G. A.

Hazel Green:
Fillbach, H. E.

Helenville:
Carmichael, C. S.

Hilbert:
Slaney, A. F.
Stauff, G. R.

Hillsboro:
Hansberry, P. H.
MacKechnie, R. S.

Hixton:
Petzke, E. A.

Hollendale:
McDonald, H. F.

Holmen:
Hanson, L. E.

Horicon:
Karsten, J. H.

Hortonville:
Towne, W. H.

Hudson:
Bradford, C. W.
Bradford, E. B.
Livingstone, J. W.
Newton, J. E.
Skogen, T. T.

Hustisford:
Goetsch, O. F.
Panetti, P. A.

Independence:
Peterson, C. F.
Stack, G. F.

Iola:
Bellerue, A. R.
Loope, T. E.

Iron Ridge:
Herman, A. H.

Iron River:
Johnson, F. G.

Jackson:
Schloemer, A. J.

Janesville:
Binnewies, F. C.
Burdick, A. L.
Clark, W. T.
Cunningham, M. A.
Edden, R. W.
Farnsworth, F. B.
Fifield, G. W.
Hartman, R. C.
Johnson, W. L.
Klein, Theodore
Koch, V. W.
Kuegle, F. H.
Lawrence, H. W.
Loomis, E. A.
McGuire, W. H.
Metcalf, G. S.
Munn, W. A.
Neupert, C. N.
Nuzum, T. O.
Nuzum, T. W.
Overton, O. V.
Palmer, W. H.
Pember, A. H.
Snodgrass, T. J.
Stevens, J. V.
Sutherland, C. H.
Sutherland, F. E.
Thorne, J. P.
VanKirk, F. W.
Welch, F. B.
Wooll, G. K.

Jefferson:
Brewer, J. C.
Busse, A. A.

Johnson Creek:
Johnston, W. M.

Juda:
Gifford, H. B.

Junction City
Reis, G. W.

Juneau:
Heath, H. J.
Hebenstreit, A. J.

Kaukauna:
Boyd, C. D.
Flanagan, G. J.
Leigh, Albert

Kendall:
Burke, Myra E.

Kenosha:
Adams, G. F.
Ashley, T. W.
Bennett, W. H.
Binnie, H. A.
Bowing, I. E.
Cleary, J. H.
Curtiss, F. D.
Dobbins, Thos.
Gephart, C. H.
Graves, J. P.
Hastings, J. F.
Hill, B. S.
Jorgensen, P. P. M.
Keskey, G. I.
Lane, J. W.
Mayfield, A. L.
McCarthy, G. W.
McClusky, O. W.
Murphy, S. W.
Nixon, Byron
Palt, J. N.
Pechous, C. E.
Pirsch, M. V.
Richards, C. G.
Riordan, J. F.
Ripley, H. M.
Robinson, H. A.
Rose, H. L.
Ross, G. L.
Ruffalo, A. F.
Schlapik, A.
Schwartz, B. J.
Schwartz, G. J.
Sokow, Theodore
Stewart, W. C.
Swarthout, E. F.
Toner, T. J.
Van Westrienen, A.
Windesheim, G.

Kewaskum:
Hausmann, N. E.

Kewaunee:
Dana, D. B.
Dockry, L. E.
Wochos, F. J.
Wochos, W. M.

Kiel:
Knauf, F. P.
Nauth, D. F.

Kilbourn:
Boynton, R. D.

Kimberly:
Maes, C. G.

La Crosse:
Anderson, N. P.
Bannen, W. E.
Bradfield, J. A. L.
Callahan, J. L.
Carlsson, E. S.
Douglas, F. A.
Eagan, R. L.
Egan, G. J.
Eidam, L. W.
Evans, Edward
Evans, J. A.
Flynn, R. E.
Gallagher, E. E.
Garrett-Bangsberg, S.
Gatterdam, P. C.
Gehring, C. A.
Gray, R. H.
Gundersen, A.
Gundersen, A. H.
Gundersen, G.
Gundersen, S. B.
Henke, W. A.
Heraty, J. E.
Herbert, R. H.
Houck, M. P.
Johnson, J. E.
Jones, W. J.
Krohn, Robert
Lueck, G. W.
MacArthur, D. S.
Margoles, F. C.
Mast, B. W.
McGarty, M. A.
McLoone, J. E.
Reay, G. R.
Rosholt, J. A.
Rowles, J. A.
Simones, V. L.
Sivertson, M.
Skemp, A. A.
Skemp, G. E.
Smedal, E. A.
Smith, D. S.
Suiter, F. C.
Swarthout, E. C.
Swarthout, Edyth C.
Townsend, E. H., Jr.
Wolf, H. E.

Ladysmith:
Bugher, C. E.
Caldwell, T. J.
Lundmark, L. M.
O'Connor, W. F.
Smith, Woodruff

Lake Geneva:
Halsey, R. C.
Keenan, T. P.
MacDonald, W. H.
Wheeler, Theodora

Lake Mills:
Eck, G. E.
Engsberg, W. A.
Leicht, Phillip
Peterson, M. G.

Lancaster:
Doolittle, J. C.
Doolittle, S. W.
Fowler, J. H.
Godfrey, Jos.
Godfrey, R. C.
Kraut, Elgie
Lechtenberg, E. H.

Laona:
Clark, J. F. W.
Ovitz, E. G.

Larsen:
Henrichsen, J. A.

La Valle:
Montgomery, R. B.

Lena:
Rose, J. F.

Little Chute:
Doyle, J. H.

Livingston:
Treglown, L. H.

Lodi:
Groves, R. J.
Irwin, G. H.

Loganville:
Jewell, E. L.

Lone Rock:
Reynolds, Bertha E.

Loretta:
Rens, J. L.

Loyal:
McGonigal, M.

Luck:
Ries, T. O.

Lugerville:
Gillespie, C. M.

Luxemburg:
Moraux, Felix

Lyons:
Wolfgram, O. J.

Madison:
Backe, I. A.
Bardeen, C. R.
Barlow, R. A.
Blankinship, R. C.
Bleckwenn, W. J.
Boner, A. J.
Bowman, F. F.
Boyce, S. R.
Briggs, S. J.
Brown, D. A.
Brown, E. J.
Bryan, A. W.
Buerki, R. C.
Bunting, C. H.
Burns, R. E.
Carns, Marie L.
Carter, H. M.
Chorlog, J. K.
Collins, D. B.
Cook, C. K.
Cooksey, R. T.
Davis, F. A.
Dean, J. P.
Dean, Joseph
Dwight, C. G.
Edwards, J. B.
Elsom, J. C.
Evans, J. S.
Ewell, G. H.
Eyster, J. A. E.
Farnsworth, C. P.
Fauerbach, L.
Fox, Philip, Jr.
Fox, P. R., Sr.
Gale, J. W.
Ganser, W. J.
Geist, F. D.
Gonce, J. E.
Greeley, H. P.
Greene, P. F.
Guilford, H. M.
Gundersen, C. A. S.
Harper, C. A.
Harper, C. S.
Harris, J. W.
Head, L. R.
Henika, G. W.
Hodges, F. J.
Hurlbut, J. A.
Hyslop, V. B.
Jackson, Arnold
Jackson, J. A., Jr.
Jackson, J. W.
Jackson, R. H.
Johnson, H. C.
Juster, E. M.
Kay, H. M.
Kurtz, C. M.
Lee, J. H.
LeWohl, F. H.
Lindsay, W. T.
Littig, L. V.
Lorenz, W. F.
Marsh, H. E.
Masten, M. G.
McCormick, S. A.
McIntosh, R. L.
Meanwell, W. E.
Meade, F. S.
Middleton, W. S.
Miller, W. J.
Montgomery, R. C.
Morris, S. I.
Mowry, W. A.
Neff, E. E.
Nelson, N. O.
Nelson, O. O.
Nesbit, W. M.
Newman, Robt.
Pohle, E. A.
Puestow, K. L.
Purcell, H. E.
Quinn, L. H.
Quisling, Sverre
Reese, H. H.
Ritchie, Gorton
Robbins, G. H.
Robbins, J. H.
Schmidt, E. R.
Schneiders, E. F.
Schubert, C. K.
Sevringhaus, E. L.
Sheldon, W. H.
Sisk, I. R.
Sisk, J. N.
Smith, K. W.
Sprague, L. V.
Stebbins, W. W.
Stout, R. B.
Stovall, W. D.
Stuessy, S. G.
Sullivan, A. G.
Sullivan, E. S.
Supernaw, J. S.
Sylvester, H.
Taylor, F. B.
Tenney, H. K.
Tormey, A. R.
Tormey, T. W.
Townsend, E. J.
Van Valzah, R.
Vingom, C. O.
Waters, Ralph
Wear, J. B.
Welke, E. G.
Werrell, W. A.
Weston, F. L.
Winn, H. N.
Wirig, M. H.

Manawa:
Irvine, R. K.
Irvine, W. J.

Manitowoc:
Aldridge, H. W.
Andrews, M. P.
Barnstein, J. E.
Donohue, W. E.
Gleason, C. M.
Hammond, F. W.
Hammond, R. W.
Kemper, W. G.
Luhman, F. S.
MacCollum, C. L. R.
Meany, J. E.
Schmitz, W. C.
Shaw, J. L.
Shimek, A. J.
Steckbauer, J. W.
Stueck, A. F.
Teitgen, Arthur
Tompkins, T. B.
Turgasen, F. E.

Marathon:
Birnbaum, F. A.

Maribel:
May, J. H.

Marinette:
Axtell, L. E.
Berglund, S. A. B.
Bird, M. D.
Boren, C. H.
Boren, J. W.
Duer, G. R.
Lid, T. A.
May, J. V.
Nadeau, A. T.
Redelings, T. J.
Schroeder, H.

Marion:
Mulvaney, F. M.
Van Schaick, R. E.

Markesan:
Blewett, M. T.
Pfisterer, F. W.

Marshfield:
Copps, L. A.
Deitchman, M. M.
Doege, K. H.
Doege, K. W.
Hayward, J. C.
Hipke, Wm.
Juers, R. H.
Mason, V. A.
McCormick, G. L.
Milbee, H. H.
Millard, A. L.
Potter, R. P.
Schwarz, S. G.
Sexton, W. G.
Vedder, H. A.
Vedder, J. B.

Mattoon:
Partridge, O. F.

Mauston:
Gregory, A. T.
Hess, J. S., Jr.

Mayville:
Bachhuber, A. E., Jr.
Bachhuber, A. E., Sr.

Mazomanie:
Griswold, F. L.

McFarland:
MacLachlan, W. G.

Medford.
Elvis, E. B.
Nystrum, L. E.
Nystrum, R. C.

Mellen:
Lockhart, C. W.

Melrose:
Higgins, E. G.

Menasha:
Corry, F. M.
Forkin, G. E.
Jensen, A. B.

Mendota:
Green, M. K.
Lando, Maxwell
Sauthoff, Aug.
Sauthoff, M. B.
Werner, H. C.

Menomonee Falls:
Burkhardt, E. W.
Domann, W. G.
Perrin, G. H.

Menomonie:
Blosmo, O. J.
Butler, F. E.
Grannis, I. V.
Halgren, J. A.
Heising, A. F.
Howison, N. L.
Long, D. T.
Lumsden, Wm.
Steves, B. J.

Mercer:
Rodecker, R. C.

Merrill:
Austria, W. F.
Bayer, W. H.
Hinckley, H. G.
Kelley, F. L.
Morris, E. K.
Morris, K. A.
Ravn, Bjarne
Ravn, E. O.
Ravn, Michael
Reinhart, D. B.
Winneman, F. A.

Merrillan:
Lowe, J. W.

Middleton:
Allen, C. F.
Rowley, A. G.

Milton:
Crosley, G. E.

Milton Junction:
Coon, G. E.
Coon, G. W.

Milwaukee:
Ackermann, Wm.
Adamkiewicz, J. J.
Allen, L. L.
Altenhofen, A. R.
Altman, M.
Andruszkiewicz, E.
Armbruster, B. F.
Arnold, F. W.
Aylward, T. J.
Bach, E. C.
Bach, J. A.
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Bach, R. J.
Baer, A. N.
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Baranowski, S. A.
Bardenwerper, H. E.
Barnes, J. S.
Barta, E. E.
Barth, G. P.
Baugh, C. W.
Baum, E. L.
Baumgart, C. H.
Baumgarten, S.
Baur, E. F.
Becker, C. J.
Beebe, C. S.
Beffel, J. M., Jr.
Belknap, E. L.
Benton, R. W.
Bentzein, E. W.
Bercey, J. E.
Bernhard, A.
Bernhard, L. A.
Bickler, E. P.
Biller, S. E.
Birk, B. J.
Black, N. M.
Blair, J. F.
Blumenthal, R. W.
Bodden, A. M.
Boerner, R. W.
Boley, M. H.
Bolger, J. Victor
Boorse, L.
Bourne, N. Warren
Brah, A. J.
Brehm, P. A.
Brey, P. F.
Brook, J. J.
Brooks, L. M.
Brown, G. V. I.
Brown, R. C.
Brown, S. V. I.
Bruins, Dirk
Brumbaugh, E. V.
Brunkhorst, R. O.
Brussock, W. A.
Brzezinski, E. A.
Burbach, T. H.
Burton, J. J.
Bussewitz, M. A.
Byrnes, M. B.
Caffrey, A. J.
Cahana, S.
Callan, P. L.
Cannon, H. J.
Carey, E. J.
Cargill, N. W.
Carhart, G. A.
Carroll, J. H.
Carson, W. J.
Cavanaugh, T. E.
Cavaney, J. J.
Chapman, F. M.
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Churchill, B. P.
Coffey, C. J.
Cohn, A. H.
Cook, E. F.
Corcoran, C. J.
Cox, J. A.
Craite, E. J.
Cron, R. S.
Crottier, C. J.
Currer, P. M.
Curtin, A. L.
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Cushing-Lippitt, E.
Dallwig, E. L.
Dallwig, H. C.
Dalton, R. J.
Daniels, L. J.
Darling, E. H.
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Davelaar, G. W.
Davidoff, I. Z.
Davis, C. H.
Dearholt, H. E.
Decker, H. G.
deNeveu, A. V.
De Nosaquo, S.
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Dieterle, J. O.
Differt, C. C.
Doern, W. G.
Doerr, Aug.
Dorr, A. M.
Drake, F. I.
Drexel, A.
Dries, Joseph
Dundon, J. R.
Durner, U. J.
Eberbach, C. W.
Echols, C. M.
Egan, W. J.
Eisenberg, J. J.
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Elconin, D. V.
Enzer, Norbert
Epperson, P. S.
Ernst, G. R.
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Fechter, F. J.
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Fellman, G. H.
Fernan-Nunez, M.
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Fidler, C. A.
Fitzgerald, G. F. A.
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McKillip, W. J.
McMahon, F. B.
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Wagner, P. C.
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Weber, A. J.
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Weingart, W. F.
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Wenn, J. F.
Wenstrand, D. E. W.
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Wetzler, S. H.
Whalen, G. E.
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Wieder, L. M.
Wigod, David
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Wilske, C. A.
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Wolters, H. F.
Yaffe, Aaron
Yanke, A. E.
Yates, J. L.
Zaun, J. J.
Ziegler, C. K.
Zillmer, H. J.
Zimmermann, C.
Zintek, S. S.
Zivnuska, J. F.
Zmyslony, W. P.
Zuercher, J. C.
Zurheide, H. O.

Mineral Point:
Brown, A. D.
Graves, L. S.
Ludden, H. D.
Ridley, S. R.

Minocqua:
Torpy, T. G.

Minong:
Hilliard, H. G.

Mishicot:
Skwor, C. J.

Monches:
Donnelly, F. J.

Mondovi:
Amunson, P. B.
Johnson, B. F.

Monroe:
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Clark, R. B.
Creasy, L. E.
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Gnagi, W. B., Sr.
Hodges, F. L.
Mauermann, J. F.
Moore, L. A.

Montello:
Federman, E. H.

Monticello:
Blumer, Edward

Montreal:
Ringo, H. F.

Mosinee:
Butler, E. F.
Jackson, J. A.

Mount Calvary:
Baasen, J. M.

Mount Horeb:
Buckner, H. M.
Thompson, A. S.

Mukwonago:
Purdy, F. P.

Muscoda:
Ehmer, J. W.
Pickering, C. R.
Ruka, E. A.

Neenah:
Briggs, H. A.
Brunckhorst, F. O.
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Greenwood, S. D.
Ott, H. A.
Ozanne, I. E.
Pitz, M. N.
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Ryan, D. J.
Smith, T. D.
Williamson, G. H.

Neillsville:
Bradbury, E. L.
Frank, J. H.
Housley, H. W.

Nekoosa:
Ball, E. J.
Pomainville, G. J.

Nelsonville:
Raasoch, H.

New Auburn:
McCormick, H.

Newburg:
Weber, H. F.

New Franken:
Looze, J. A.

New Glarus:
Francois, S. J. A.
McQuillin, E. D.

New Holstein:
Engel, A. C.
Krohn, H. C.

New Lisbon:
Starnes, Brand

New London:
Borchardt, A. C.
Borchardt, M. A.
Monsted, J. W., Jr.
Pfeifer, F. J.
Schneider, F.

New Richmond:
Armstrong, J. H.
Epley, O. H.

Niagara:
De Salvo, Francis

North Fond du Lac:
Prees, R. L.
Pullen, A. J.

North Milwaukee:
Dohearty, W. H.
Pugh, G. J.
Tousignant, A. N.

Norwalk:
Allen, J. S.

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Hassall, J. C.
Loughnan, A. J.
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Rogers, A. W.
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Goggins, R. J.
Krahn, G. W.
Ohswaldt, H. F.

Ogema:
Mitchell, F. W.

Omro:
Fleury, F. D.

Ontario:
Devine, G. C.

Oostburg:
Was, Edward

Oregon:
O'Brien, J. M.

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Belting, G. W.

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Simenstad, L. O.

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Allen, L. P.
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Baker, K. W.
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Oxford:
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Keithley, J. A.

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Chandler, J.
Gillette, H. E.

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Leahy, J. D.
Riley, E. A.

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Belitz, A. E.
Brookie, R. W.

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Desbois, P.

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Egloff, L. W.

Phelps:
Weed, L. G.

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Norviel, H. B.
Sperry, W. P.
Van Hecke, D. S.

Pittsville:
Beyer, Hart

Platteville:
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Buck, G. C.
Cunningham, Wilson
Dunn, E. A. A.
Pretts, W. W.
Schuldt, C. M.

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Deicher, H. F.
Felter, E. B.
Meyer, R. C.
Radloff, A. C.
Sieker, A. W.

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Bentley, J. E.
Henney, C. W.
Kellogg, J. R.
MacGregor, J. W.
Meacher, B. C.
Roberts, J. A.
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Snyder, K. A.
Taylor, W. A.
Tierney, E. F.

Port Washington:
Aston, E. G.
Cassels, G. S.
Drissen, W. H.

Potosi:
Ware, Frank A.

Pound:
Armstrong, G. E.

Poynette:
Focke, W. J.

Prairie du Chien:
Antoine, F. J.
Armstrong, C. A.
Kane, J. J.
Pinkerton, W. T.
Satter, O. E.

Prairie du Sac:
Hudson, R. J.

Prentice:
MacKinnon, G. E.

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Travenick, J. Jr.

Pulaski:
Vandandaique, I.

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Thackeray, R. C.
Tompach, E. L.
Von Buddenbrock, E.
Wagner, N. B.

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Costello, W. H.
Jones, A. W.

Random Lake
Malloy, T. E.

Redgranite:
Beglinger, H. F.

Reedsburg:
Edwards, A.

Reedsville:
Cary, E. C.

Reeseville:
Eickelberg, F. A.

Rhinelander:
Bump, W. S.
Friesbie, R. L.
Gibson, H. V.
Packard, C. D.
Perry, Gentz
Richards, C. A.
Schiek, I. E.
Westgate, H. J.

Rib Lake:
Baker, G. L.

Rice Lake:
Charron, T. A.
Dawson, D. L.
Knapp, E. J.
Longstreth, C. L.
Sattre, O. M.
Wallis, J. H.
White, A. S.
Wiger, H. C.

Richfield:
Bossard, C.

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Benson, G. H.
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Coumbe, W. R.
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Edwards, W. C.
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Ross, J.M.

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Senn, C. U.

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Dawson, C. A.
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McJilton, C. E. J.

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Hines, L. L.

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Scheid, M. M.

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Salem:
Fletcher, W. T.

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Status of "State Medicine" In Other Countries; Summary From Ohio State Medical Journal

A statement and data published some time ago by the Bureau of Labor Statistics of the United States Department of Labor, reviewing the world-wide development of compulsory state insurance against illness, illustrates the wide-spread and fundamental nature of the question of socialized medicine.

The statistics announced by that federal bureau show that there is a compulsory system of state medicine for wage earners in force in twenty-four countries.

These data emphasize the importance of the question of state medicine in America. Those who insist that the problem of state medicine in this country is "a mere bugaboo" or who declare that "there ain't no such animal" are either uninformed or attempting to mislead others.

Regardless of the numerous definitions and conceptions of "state medicine", we have at present in this country well-defined and definitely recognized systems of state medicine for which at the present time there is rather general approval. These include provision for the medical care, custody and treatment of indigents; for the custody and treatment of insane and feeble-minded; official public health administration; sanitary provisions; pure water supplies; control of communicable diseases; workmen's compensation law; and other administrative functions recognized and accepted in our political and social system.

The question is therefore not whether we oppose or advocate "state medicine" but whether we approve unlimited *extension* of state medicine. In other words, shall we have further extension of clinics and systems of treatment for those able to provide such service for themselves? Shall we have further state supervision over medical practice? Shall we have standardization of fees? Shall we have medical service dispensed at so much per annum without regard to the amount and importance of service rendered? Shall we eliminate the professional relationship and personal responsibility between physician and patient? Shall physicians be public employes under civil service on definite salaries?

At any rate, the statement issued by the Federal Bureau of Labor Statistics is significant and worthy of serious consideration. It further emphasizes the necessity for physicians, through medical organization, to understand fully present problems and future trends, and to be prepared, through organization, to represent the viewpoint of practicing physicians in a definite and rational manner.

A summary of the review as made public by the Bureau of Labor Statistics follows:

"The insecure position of the working class in regard to sickness and employment has led to the gradual development of schemes of insurance against these contingencies in many countries. The early years of the industrial revolution were marked by a general indifference to the welfare of the workers and it was not until the middle of the nineteenth century that the first laws for the protection of workers were planned.

"These first cautious experiments were aimed merely at lessening to some extent the sweating of women and children and for many years no attempt was made to provide compensation in case of accident or to provide for sickness. During the third quarter of the nineteenth century employers instituted numerous welfare features such as hospitals, homes, and pension and relief funds, but these schemes covered a small proportion of the working class.

Workers Entered Field

"The mutual-aid funds which started in Great Britain and spread later to the continent embodied the workers' first attempts to provide against these

(Continued on page XX)

THE JOURNAL BOOK SHELF

Surgical Pathology. By William Boyd, M. D., professor of pathology, University of Manitoba, Winnipeg, Canada. Second edition, revised and reset. Octavo of 933 pages, with 474 illustrations and 15 colored plates. Cloth $11.00 net. W. B. Saunders Company, Philadelphia and London.

The Collected Papers of the Mayo Clinic and the Mayo Foundation for 1928, Volume XX. Edited by Mrs. M. H. Mellish, Richard M. Hewitt, M. D., and Mildred A. Felker, B. S. Octavo volume of 1197 pages with 288 illustrations. Philadelphia and London: W. B. Saunders Company, 1929. Cloth, $13.00 net.

Clinical Aspects of Venous Pressure. By J. A. E. Eyster, B. Sc., M. D., Prof. of Physiology, University of Wisconsin; Associate Physician, Wisconsin General Hospital. Cloth, 8vo., 135pp., Macmillan Company, Chicago, $2.50.

A Study of Masturbation and the Psychosexual Life. By John F. W. Meagher, M. D., neurologist to St. Mary's Hospital, Brooklyn. Second edition. Price $2.00. William Wood & Company, New York City.

Varicose Veins. With special reference to the injection treatment. By H. O. McPhecters, M. D., director of the Varicose Veins and Ulcer Clinic, Minneapolis General Hospital, associate staff of Northwestern Hospital, Minneapolis, Minnesota. Illustrated with half-tone and line engravings. Price $3.50 net. F. A. Davis Company, Philadelphia.

Gynecologic Technic. By Thomas H. Cherry, M. D., professor of Gynecology, New York Post Graduate Medical School and Hospital. With 558 half-tone and line engravings, from photographs and pen and ink drawings by the author. Price $8.00 net. F. A. Davis Company, Philadelphia.

Sterilization for Human Betterment. By E. S. Gosney and Paul Popenoe. A summary of results of 6,000 operations in California, 1909–1929. Price $2.00. The Macmillan Company, 60 Fifth Ave., New York City.

The Common Head Cold and its Complications. By Walter A. Wells, M. D., professor of Oto-Laryngology, Georgetown University, Washington, D. C. With an introduction by Hugh S. Cumming, M. D., surgeon general United States Public Health Service. Price $2.75. The Macmillan Company, 60 Fifth Ave., New York City.

Outline of Preventive Medicine. For medical practitioners and students. Prepared under the auspices of the Committee on Public Health Relations, New York Academy of Medicine; 21 contributions. Editorial Committee: Frederick E. Sondern, Chas. Gordon Heyd, E. H. L. Corwin. Price $5.00. Paul B. Hoeber, Inc., New York City.

BOOKS RECEIVED FOR REVIEW

Diseases of the Chest and the Principles of Physical Diagnosis. By George W. Norris, M. D., professor of clinical medicine in the University of Pennsylvania, and Henry R. M. Landis, M. D., professor of clinical medicine, University of Pennsylvania; director of the clinical and sociological departments of the Henry Phipps Institute of the University of Pennsylvania, with a chapter on the Transmission of Sounds Through the Chest, by Charles M. Montgomery, M. D., and a chapter on the Electrocardiograph in Heart Disease, by Edward Krumbhaar, Ph. D., M. D. Fourth edition, revised. Pages, 954 with 478 illustrations. Price $10.00 net. W. B. Saunders Company, Philadelphia and London, 1929.

Minor Surgery. By Frederick B. Christopher, M. D., associate in surgery at Northwestern University Medical School, Chicago. With a foreword by Allen B. Kanavel, M. D., professor of surgery, Northwestern University Medical School. Octavo of 694 pages with 465 illustrations. Price $8.00 net. W. B. Saunders Company, Philadelphia and London, 1929.

Practical Massage and Corrective Exercises with Applied Anatomy. By Hartvig Nissen, superintendent of Hospital Clinics in massage and medical gymnastics. Fifth edition, revised and enlarged by Harry Nissen, president, Posse-Nissen School of Physical Education, Boston, Mass. Illustrated with 72 original half-tone and line engravings. Price $2.50 net. F. A. Davis Company, Philadelphia.

An Introduction to the Study of the Nervous System. By E. E. Hewer, D. Sc. (Lond.) and G. M. Sandes, M. D., B. S. (Lond.), M. R. C. S., L. R. C. P. Price $6.50. C. V. Mosby Company, St. Louis.

Modern Methods of Treatment. By Logan Clendening, M. D. With chapters on special subjects by H. C. Anderson, M. D.; J. B. Cowherd, M. D.; H. P. Kuhn, M. D.; Carl O. Rickter, M. D.; F. C. Neff, M. D.; E. H. Skinner, M. D.; and E. R. De Weese, M. D. Third edition. Price $10.00. C. V. Mosby Company, St. Louis.

The Blood Picture And Its Clinical Significance (Including Tropical Diseases). By Professor Dr. Victor Schilling, physician-in-chief, The First Medical University Clinic, Charite, Berlin. Translated and edited by R. B. H. Gradwohl, M. D. A guidebook on the microscopy of blood. Seventh and eighth revised edition with 44 illustrations and 4 color plates. Price $10.00. C. V. Mosby Company, St. Louis.

Disorders of the Sexual Function in the Male and Female. By Max Huhner, M. D. Third edition. Price $3.00 net. F. A. Davis Company, Philadelphia, 1929.

The Newer Knowledge of Nutrition. By E. V. McCollum, Ph. D., Sc. D. and Nina Simmonds, Sc. D. (Hygiene). Illustrated. Fourth edition rewritten. Price $5.00. The Macmillan Company, New York.

Methods and Problems of Medical Education. Fourteenth Series. The Rockfeller Foundation, 61 Broadway, New York, 1929.

NOTE the dates upon which we published and sent these advices to our clients . . . . . need we say more of the timeliness of the Investment Counsel offered by Morris F. Fox & Co. . . . A New Bulletin has just been published. May we send it to you? Copies of the bulletins shown below are also available.

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BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Secretary, Mr. J. G. Crownhart, 119 E. Washington Ave., Madison, Wisconsin. These new books will be loaned for an inspection period only.

The Injection Treatment of Hemorrhoids. By Charles Conrad Miller M. D. Modern Surgery Publications, Chicago, 1929.

From the proctologist's stand point there is little of value in this book, except as it refreshes his memory of various articles he has read, and in most cases forgotten.

It demonstrates and emphasizes emphatically that the injection method must only be used by proctologists of wide experience, and thus thoroughly trained in diagnostic and surgical fields to be absolutely sure of the few cases it might be applicable. Uncomplicated cases of internal hemorrhoids are about as few in number as internal rectal papillomas, and these occur about once in a hundred consecutive cases of anal rectal diseases.

I do not believe this book is of any value to the general practitioner, except that it might bring him to realize the many conditions that develop in the rectum, thus stimulating his efforts towards better diagnosis, and making less attempts at correcting them.

The injection method of treating hemorrhoids can never be successful in the general practitioners hands, and the skilled proctologist is too busy and has little time for it. A. W. J.

Tularemia. History, pathology, diagnosis and treatment. By Walter M. Simpson, M. D., director of the Diagnostic Laboratories, Miami Valley Hospital, Dayton, Ohio. With 53 text illustrations and 2 colored plates, Price $5.00. Paul B. Hoeber, Inc., New York.

Dr. Simpson has put into the pages of a small volume all that we now know of tularemia, a disease discovered in the United States by the physicians of the Public Health Service and claiming its quota of unsung heroes and martyrs. Dr. Simpson has had unusual opportunities to study this disease and he has made the most of his opportunities showing a most commendable zeal in discovering cases in his home city of Dayton, Ohio. The book is most interesting. The chapter upon the history of the disease and allied diseases is most fascinating. The book is beautifully illustrated and deserves to have a place in the library of every physician. The author is to be congratulated upon presenting such a permanent contribution to medical literature. L. M. W.

The Treatment of Diabetes Mellitus. With higher carbohydrate diets. By William David Sansum, M. D.; Percival Allen Gray, M. D., and Ruth Bowden, B. S. Price. $2.50. Harper & Brothers, New York and London.

This monograph is divided into two parts. Part one deals with the diagnosis and general management of diabetes and part two consists of instructions in the construction of diets for diabetic patients. The general principles of treatment and the complications of diabetes are discussed and explained in a simple and clear manner.

The author has advocated for some time that the diabetic diets in general use have been unsatisfactory because they violate the principles of the normal diet. He has aimed in this book to show that a diabetic diet may be so constructed as to nearly approach the normal diet, which is high in carbohydrate and low in fat.

In part two there is a discussion of foods. Many tables and calculations are given. Diabetic diets are calculated and sample menus and recipes are included.

Physicians and students should find this a valuable book; for it is a short, clear, up to date and interesting presentation of the subject. F. D. M.

The Nutrition of Healthy and Sick Infants and Children. For physicians and students. By E. Nobel, professor of the University and first assistant of the Children's Hospital of the University of Vienna; C. Pirquet, late professor of the University of Vienna and Director of the Children's Hospital of the University, and R. Wagner, associate professor and second assistant of the Children's Hospital of the University of Vienna. Second revised edition with 78 illustrations (including charts) and 6 tables. Authorized translation by Benjamin M. Gasul, M. D., consulting pediatrist at the Municipal Tuberculosis Sanatorium of Chicago. Price $3.50 net. F. A. Davis Co., of Phila.

This volume represents the theory and practice of the pediatric department of the University of Vienna. The theoretical part consists in the exposition of Pirquet's views on nutrition and gives an explanation of the "nem" system. However ingenious and valuable the "nem" system may be, American pediatrists have not adopted it in the past and probably never will. It is difficult to see what is to be gained by using the word nem for calorie and how the use of the nem system will aid in a better understanding of nutrition. The practical part of the book is valuable and instructive. Disturbances of nutrition are considered wholly from a clinical viewpoint, which consists chiefly in determining the quantity of food that the patient receives. Disturbances of nutrition may be the result of underfeeding or overfeeding, they may be acute or chronic, and there may be diarrhea or vomiting, or neither. Therapy is very simple, increase or reduce the quantity of food, do not overstep the food tolerance. In cases of vomiting, when the infant retains enough food so that he gains weight, no treatment is required. These principles approach the present day viewpoint in this country and show how infant nutrition has been simplified. There are chapters on nutritional management in infectious diseases, and disorders of metabolism such as

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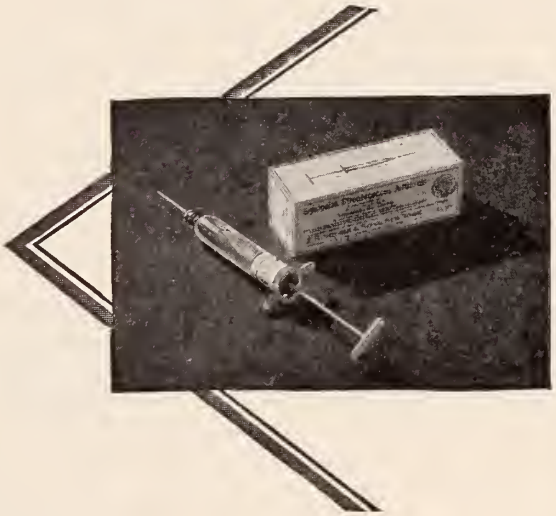

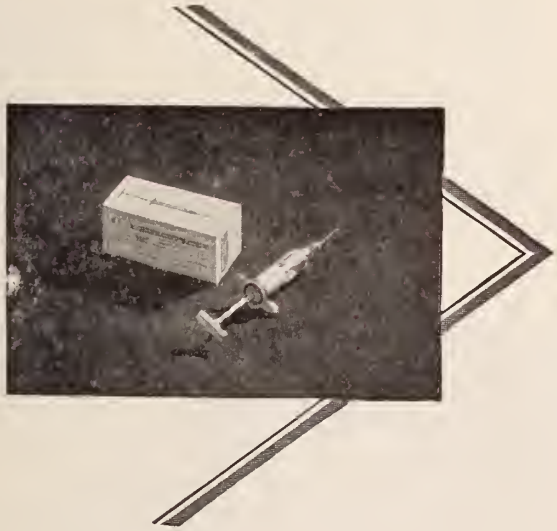

Tetanus Antitoxin Squibb

Every wound in which skin continuity is destroyed is a possible route of tetanus infection. Just as routine practice of injecting anti-tetanic serum during the World War practically eradicated tetanus so in civil practice this disease might be stamped out by the same routine practice.

TETANUS ANTITOXIN SQUIBB is small in bulk, high in potency, low in total solids, yet of a fluidity that permits rapid absorption. It is remarkably free from serum-reaction producing proteins.

TETANUS ANTITOXIN SQUIBB is supplied in vials or syringes containing an immunizing dose of 1500 units. Curative doses are marketed in syringes containing 3,000, 5,000, 10,000 and 20,000 units.

(Write to the Professional Service Department for Literature)

E·R·SQUIBB & SONS, NEW YORK

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.

diabetes, obesity, epilepsy, anemia, etc. There is also a chapter on diet forms and recipes.

There are many valuable practical hints in this book and excellent graphic charts and illustrations. This volume can be recommended to those who are well grounded in the theory of infant nutrition as an aid in actual practice. R. G.

Tributes to Ernst Copeland, M. D.

(Continued from page 601)

side of Reed street, near the corner of Elizabeth (National avenue) and almost immediately became popular?

Henry Claymier, chief of the fire department, lived nearby, as did Daniel Darius Hooker. These men took a deep interest in the young physician. Dr. Copeland's specialty was obstetrics, and his good reputation soon extended to the east and west sides. Then he moved uptown, his practice grew and he formed a partnership with Dr. Walbridge.

Some widely known Milwaukee men and women were helped into the world by Dr. Copeland. And lots of them loved him as they should.

When I read of his passing and saw the statement that he had canceled all of the accounts on his books, I remembered what he said to me when, long ago, on an extremely hot day, he brought into the world a beautiful daughter of mine. I quit work on the day of his funeral and devoted some of my time to recollections. I could repeat his very words:

"Hooker, you're worrying; don't do it."

"Yes, doctor," I replied, "I am, for several reasons. Here you've done so much for me and mine and I've no ready money to pay you."

"Stop it!" he fairly shouted at me. "Stop it! And, if you can, forget it! This is my regular job. I believe in it. Money isn't everything. Duty is greater. If you never pay me it will be all the same to me."

And I can see him now, rolling down his immaculately white shirt sleeves, calling for a glass of water and then bidding me goodbye.

Ernst Copeland! There should be a deeply carved sentence on his tombstone, reading something like this:

"Real Doctor—Humanitarian."

Later on, when I paid him, he said he hated to take the money.

—From The Milwaukee Journal.

Status of "State Medicine" in Other Countries

(Continued from page 631)

risks, but the field of these organizations was also limited and the resources were too small to enable them to undertake insurance against prolonged illness or disablement. Parliaments and legislative bodies, however, during the last part of the century took an increasingly active part in the solution of problems of labor protection and the public authorities encouraged and assisted the mutual aid movement.

"With this encouragement and support the voluntary insurance movement has greatly increased its scope in the past half century, but in spite of the growth of this form of insurance only a small proportion of the workers are insured thereunder. In view of the fact, therefore, that voluntary insurance has not provided general and effective protection, a system of compulsory insurance has been instituted in most of the industrial states of Europe and in a few other countries.

"The International Labor Conference at its seventh session, held in 1925, passed a resolution requesting the International Labor Office to continue its work of collecting information with regard to social insurance, and studies covering both the compulsory and voluntary insurance of wage earners against sickness have accordingly been made.

Costs and Benefits

"The points covered, so far as possible, for each of the twenty-four countries having a compulsory sickness insurance system were: The classes and number of workers subject to the law the nature and the amount of the benefits; the division of costs between the state, the employers and the workers; total annual cost; methods of administration; annual expenditure; and the use of social insurance reserves for the improvement of public health.

"The first country to make sickness insurance compulsory was Germany, where it was instituted by Bismarck for political reasons in 1883. Industrial workers were covered by the first plan and in 1885 it was extended to commerce and the following year to agriculture. Austria and Hungary introduced a system of compulsory sickness insurance for workers in industry, transport, and commerce in 1883 and 1891, while the principle of compulsory insurance was adopted by Luxemburg in 1901, Norway in 1909, Serbia in 1910, Great Britain and Russia in 1911, and Rumania in 1912. The systems in force in Estonia and Latavia are based upon the Russian law of 1911.

Recent Extensions

"The European states created by the peace treaties have passed laws amending the insurance schemes they inherited. Thus Czechoslovakia in 1919, Poland in 1920, Austria in 1921, and Yugoslavia in 1922 made sickness insurance compulsory for all wage earners; Bulgaria in 1924 extended the 1918 law to cover all classes of workers, and Portugal in 1919 and Greece in 1922 also adopted the principle.

"In Soviet Russia a system of compulsory insurance was incorporated in the 1922 Labor Code, taking the place of the system of public assistance established in 1918. Lithuania passed a sickness insurance law in 1925, which has not yet been put into effect, and France, after several years of consideration of the question, has recently established a vast scheme of compulsory insurance against sickness, invalidity, old age, and death.

"Countries outside of Europe which have adopted compulsory systems are Japan (1922) and Chile (1924) while the governments of Australia and South Africa have appointed commissions to study schemes of compulsory social insurance against sickness."

THE WISCONSIN MEDICAL JOURNAL

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"I hold every man a debtor to his profession, from the which as men of course do seek to receive countenance and profit, so ought they of duty to endeavor themselves, by way of amends, to be a help and ornament thereunto."

—Francis Bacon.

Waukesha Springs Sanitarium

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AMMONIACAL URINE

"As the case improves, dextri-maltose may be substituted for the malt extract so that the final formula reached will contain dextri-maltose as the carbohydrate."

MEAD'S DEXTRI-MALTOSE

From Text Books of over a decade

QUITE apart from the local therapy and care of diapers in the control of cases of ammoniacal urine is the question of diet. Diet is an important matter.

The etiology, in the majority of these cases, indicates an intolerance for milk fat. High fat feedings result in an excess of volatile fatty acids in the stomach and intestines and a condition of "acidosis" prevails.

Constipation is a marked symptom. Hard, dry, crumbly stools of grey color can be shaken from the diaper without leaving stains; fat indigestion consisting chiefly of insoluble soaps.

Dietary treatment consists in the reduction of fats to the infant's tolerance and the increased addition of carbohydrates to restore the caloric value of the food.

Mead's Dextri-Maltose No. 3 is the indication, first, because of its easy assimilation and second, because it contains an alkali in the form of a 3% addition of potassium bicarbonate to aid in overcoming the constipation.

THE MEAD POLICY

Mead's infant diet materials are advertised only to physicians. No feeding directions accompany trade packages. Information in regard to feeding is supplied to the mother by written instructions from her doctor, who changes the feedings from time to time to meet the nutritional requirements of the growing infant. Literature furnished only to physicians.

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"There are men and classes of men that stand above the common herd; the soldier, the sailor, and the shepherd not infrequently; the artist rarely, rarelier still, the clergyman; the physician almost as a rule. He is the flower (such as it is) of our civilization; and when that stage of man is done with, and only to be marveled at in history, he will be thought to have shared as little as any in the defects of the period, and most notably exhibited the virtues of the race."

—Robert Louis Stevenson, Preface to Underwoods.

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ATROPHY

"Maltose is indicated in very difficult feeding cases and in severe cases of malnutrition and atrophy. It is part of the routine in the treatment of chronic indigestion from fat. Carbohydrate indigestion is more frequently seen in cases fed on lactose or on cane sugar: in such cases maltose is indicated."

MEAD'S DEXTRI-MALTOSE

From Text Books of over a decade

MEAD'S DEXTRI-MALTOSE is usually indicated for feeding difficult cases.

While all carbohydrates can cause nutritional disturbances, it has been shown that Mead's Dextri-Maltose is the form least likely to cause such disorders as fermentative diarrhoea, indigestion in infants, having a low tolerance for sugar.

It is because this carbohydrate is better tolerated by the majority of infants with an inclination to diarrhoea that it is used so extensively in cases where such a condition has been present.

This, coupled with the fact that it can be given sooner and in larger amounts in cases recovering from nutritional disturbances, is added assurance that satisfactory gains in weight will result with less danger of a return of the complaint.

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MADISON, WIS., MARCH, 1929

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The most important conservation work is that which pertains to human life, human wellbeing and happiness and all of our conservation should look to that ultimate end. * * *

We have been learning from the psychologists more about the treatment that should be given defectives and delinquents, from the medical research laboratories more about the causes of disease, and we are coming more and more to see that for many of our ills prevention is just as practicable as cure and is infinitely more wise and helpful.

—Gov. Walter J. Kohler.

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CELIAC DISEASE

"A non-laxative combination of dextrin and maltose is best adapted because it can be given in such large amounts as necessary to cover the caloric needs without producing fermentation, diarrhea and intoxication." - - - - - - - -

MEAD'S DEXTRI-MALTOSE

From Text Books of over a decade

WHILE celiac disease is met only occasionally in infant feeding, its stubborn resistance to treatment is well known.

This disease alternates between constipation and diarrhea, accompanied by intermittent vomiting, caused by a low acidity of the stomach.

The stools are characteristic of this particular type of indigestion, large, foul and bulky from undigested fat.

There is a marked intolerance for fats and, to a lesser extent, for carbohydrates.

Treatment then lies in the correction of the diet. The amount of fat must be lessened and the carbohydrate increased to make up this deficiency.

Mead's Dextri-Maltose is the indication in such cases because of its easier assimilation in cases of weakened digestive powers.

Because of its greater assimilation limits, it is used liberally by infant feeders in the case of well infants. This, because it offers the greatest insurance against the appearance of digestive disturbances.

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"There are today lying all about, as yet uncorrelated, many if not most of the raw materials for a vast system of state medicine or its equivalent in the corporate medical activities of industries, insurance companies, and the like. Now, personally, I dislike to see fall into the hands of government any activity that can be done equally well or better by one of the great functional groups of men as they go about their daily work in their trades or professions. And so, I raise the question: Is private medicine to be swallowed up by state medicine or its equivalent? The answer to this question will, I think, depend entirely upon the quality of medical statesmanship displayed by the medical profession during the next few years."

—Glenn Frank, President, University of Wisconsin

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THE NIGHT CALL

MEAD'S

Mead's
Dextri-Maltose
For Infant Feeding

No. 1
With 2% Sodium Chloride for Normal Infants.

No. 2
Salt Free

No. 3
With 3% Potassium Bicarbonate for constipated Infants.

"The Night Call"—a reproduction 13¼ x 12" in color from the original suitable for framing will be sent on request.

FOR fifteen years this big man in the fur coat has been devoted to the call of service in his chosen profession. Fresh and determined from the medical school, he took over the old doctor's practice. At first it was said he never could, even in a small measure, compensate the community for its loss when the old doctor passed on. But time has proved that he could.

The old doctor imparted to the other some of his own wisdom, his own patient philosophy of life and service. The younger man, sensitive and a seer in his own right, builded on from his own experience through the practical application of his knowledge of medicine and the personal art of being human and humane.

So into his training passed the long discipline of study and preparation, together with that more rigorous responsibility to answer the summons when duty calls, whenever, wherever or for whatever the need may be.

He may watch for hours upon end without sleep, eat but little, relax never, yet no one hears him complain. No one thinks he ever becomes weary, or longs for a respite and so day or night, in season and out, when the telephone rings a voice carries back, "*This is the doctor. Yes, I will come.*"

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"My sixty years of experience have firmly convinced me that of all the so-called professions, medicine is today by far the most desirable and that potentially it can give more of real comfort and happiness and can offer more of genuine service to the human race than any other. With such a background and such a goal before us we can do nothing else than adopt the motto of our beloved state—'Forward!' And, as each works out his own destiny in his appointed place, may we all remember that we are members of a great and noble profession and that its character and progress are absolutely determined by the character and ideals of its individual members. If we worthily meet this challenge, I shall be encouraged to believe that my dream and hope of a medical profession made up of 'educated gentlemen' may be completely realized. A gentleman, you know, is a person who treats everyone gently, kindly, more than all, justly and with human consideration."

—Charles S. Sheldon, M. D., 1842-1929.

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MEAD'S DEXTRI-MALTOSE in Any System of Infant Feeding—

THE greater known assimilation limits of Mead's Dextri-Maltose make this form of carbohydrate most acceptable to replace the deficiency found in all cow's milk and water formulae. This is true of any system of infant feeding.

For many years physicians have used it with good results in fresh cow's milk and water modifications. Yet within recent years the milk itself has undergone various modifications or alterations for the sake of preservation. In many cases these alterations have given definite advantages over fresh milk for different conditions in infant feeding.

Among such milks may be mentioned:

Powdered Lactic Acid Milk
Evaporated Milk
Powdered Milk
Powdered Protein Milk
Fresh Cow's Milk

The advantages following the use of Mead's Dextri-Maltose in fresh cow's milk and water mixtures will be present when this carbohydrate is used in any of the above milk mixtures.

Use it in these formulae as you do in the feedings prepared from fresh cow's milk and water. Its addition to the infant diet in any of these milks will meet with good clinical results in the majority of cases. Its known assimilation limits assure its absorption with a minimum tax upon the digestive tract of the infant. Freedom from nutritional disturbances has always been noticeable whenever it is used.

Suggested Formulae for 24 Hour Feedings

Fresh Cow's Milk

	Oz.
Mead's Dextri-Maltose	
Fresh Cow's Milk	
Water	

Lactic Acid Milk

Mead's Dextri-Maltose	
Mead's Powdered Lactic Acid Milk	
Water	

Protein Milk

Mead's Powdered Protein Milk	
Mead's Dextri-Maltose	
Water	

Evaporated Milk

Mead's Dextri-Maltose	
Evaporated Milk	
Water	

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"No great object can be gained, no great enterprise successfully accomplished, without exertion, sacrifice and assiduity. No one ever gained the highest round on the professional ladder like a bird from the air, and no one ever will. That round is only reached by efforts begun at the base." J. G. Meachem, Sr., M. D., President's Address, 1880.

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H. H. REESE, M. D.

For further information address: NORMANDALE, Madison, Wis.

CONSTIPATION

"The substitution of one of the maltose-dextrins mixtures for milk or cane sugar also sometimes relieves constipation in little babies.*** Those preparations which contain the potassium salts are apparently somewhat more laxative than those containing the sodium salts."

MEAD'S DEXTRI-MALTOSE

From Text Books of over a decade

MEAD'S DEXTRI-MALTOSE No. 3 (with potassium bicarbonate) is indicated for constipated babies. Potassium salts added to cow's milk cause the formation of a soft coagula and softer stools.

In human milk there is a preponderance of potassium over calcium salts, while calcium salts predominate in cow's milk. The calcium in cow's milk tends to cause the formation of large tough curds in which are enveloped large quantities of fat.

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MILWAUKEE, WIS., JULY, 1929

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It is shared alike by the pediatrist whose practice is confined exclusively to the feeding of infants, and the general practitioner whose work covers a multitude of different cases.

An abundance of clinical evidence has proved it is well tolerated, easily assimilated and generally productive of satisfactory results. In combination with various cow's milk and water modifications it has probably *successfully* been used to feed more infants than any other carbohydrate offered the medical profession.

A few infants can tolerate *any* carbohydrate. But *any* carbohydrate can not be fed all babies under all conditions. The success characterizing the use of Mead's Dextri-Maltose in the combined experience of infant feeders is that it will successfully feed *more* infants than any other now in use.

Sample and Literature on Request.

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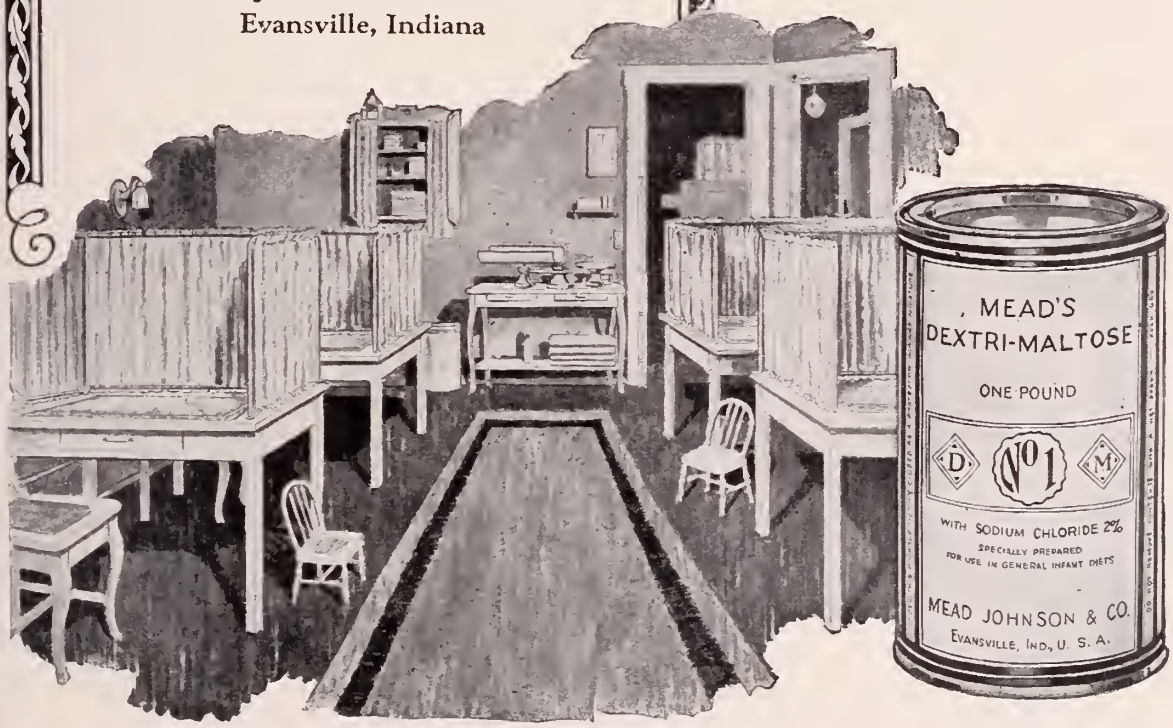

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September 11th, 12th and 13th. See page 380.

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The urgent demand of the time is for unified action and for expression through a great voice that will speak authoritatively for the entire profession of medicine in the several states and in the United States. This demand can be properly met through unity that is possible only as the profession is compactly organized. Its attention must be centralized, without undue division of fealty and without unnecessary waste, on those responsibilities and duties that naturally devolve on the profession in its organized capacity, and that heretofore have always been discharged with credit and honor.

—Olin West, M. D., Secretary, A. M. A.—1929.

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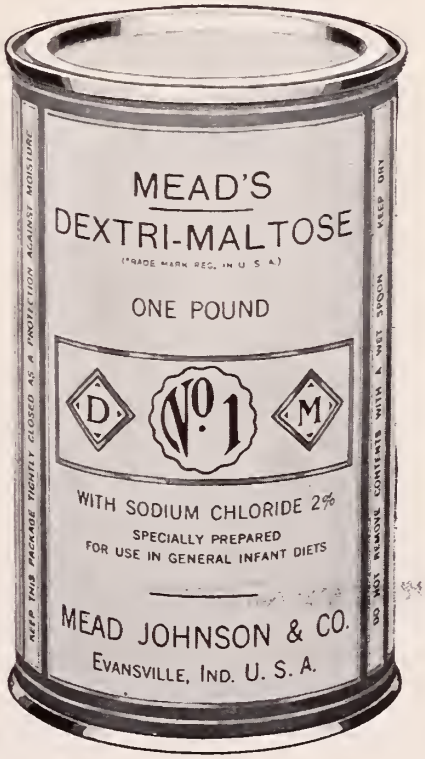
The addition of Dextri-Maltose makes up the carbohydrate deficiency in the cow's milk. It is easily assimilated—well tolerated.

Gains in weight are usually normal, presenting a healthy clinical picture—sound musculature—good color.

There is a minimum of nutritional disturbances of a fermentative nature due to the greater assimilation limits of Dextri-Maltose over either lactose or sucrose.

Dextri-Maltose No. 1 is indicated for normal infants, while the No. 3 with 3% addition of potassium bicarbonate, is the clinical choice if calcium constipation is present.

These observations are made from the results obtained in hospitals, in clinics and from many physicians in private practice.



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"But Doctor, You don't treat many *sick* babies."

To the woman pictured in this interview, it somehow seemed that in a case of artificial feeding, intestinal disturbances were an inevitable necessity—that these were dread diseases which in some vague, mysterious manner, baffled all efforts to prevent and whose correction lay in the drastic administration of drugs.

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This remark was made by a mother, with her infant in her arms, as she discussed her own case with her physician. Paradoxically enough, because her physician was a successful infant feeder, he gave promise to lose standing in her estimation.

The Doctor's reply was illuminating to this mother—

"We don't treat many sick babies because we feed more well babies properly."

So modern feeding practice seeks first to preserve the infant's health rather than correct nutritional disturbances. And in this it is eminently successful. What this patient did not realize was that the physician needed her confidence and co-operation.

The dangers of carbohydrate fermentation are greatly minimized, weight gains with sound body turgor are easier to secure by the use of Mead's Dextri-Maltose in fresh cow's milk or lactic-acid milk mixtures.

It is readily assimilated by the infant and is supplied the doctor with different salt contents. No. 1 with sodium chloride 2% for normal cases, No. 2, salt free and No. 3 with 3% Potassium Bicarbonate for constipated infants.

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The Answer:

There are no standardized babies and therefore no standardized foods are suitable for all babies. The requirements of the individual baby must be considered.

This is why the formulas of Mead's Dextri-Maltose, cow's milk and water are most popular with a majority of physicians, because these formulas can be regulated to suit the requirements of the individual baby.

First Thought—Breast Milk.

Second Thought—Mead's Dextri-Maltose, Cow's Milk and Water.

Scientific literature and a supply of Dextri-Maltose for clinical observation will be furnished on request.

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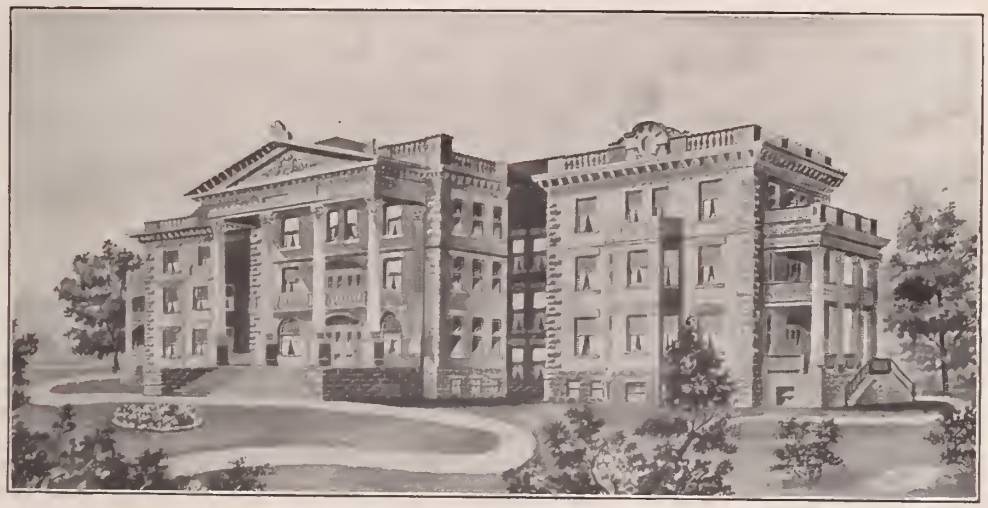

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—From an address in this issue by Olin West, M. D., Secretary and General Manager, American Medical Association.

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Nine out of ten mothers can give their babies the breast. What can the physician tell these mothers who want to wean their babies before they nurse them?

Types of Mothers and Their Infant-Feeding Problems

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"Doctor, I will have to give up nursing my baby. Our expenses have been very heavy lately and I must go back to business. My position is open for me provided I go back next week."

"Of course, you know, Mrs. Rush, that breast milk is best for your baby. In every way, it is far ahead of the best formula. It is free from bacteria and dirt, it never sours, it is always correct in temperature, and quicker as well as cheaper than bottles. I haven't much respect for the mother who won't nurse her baby. Your case is perhaps more excusable, for at least you have nursed your baby up to the point where the economic shoe is pinching pretty tight."

Doctor, in situations like this, where extenuating circumstances make artificial feeding necessary, we hope you will consider Mead's Dextri-Maltose modification of cow's milk as the next-best-to-mother's-milk infant food. We hope you will be influenced in its choice, not only because of its long clinical background but because of the ethical character of its makers.

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